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MIDWESTERN WETLAND FLORA

FIELD OFFICE GUIDE TO PLANT SPECIES

Peachleaf Willow

Salix amygdaloides Anderss.

Family: Willow (Salicaceae)

April-June

Field Marks: The leaves of the peachleaf willow are pale on the lower surface. Leaf-like stipules at the base of each leafstalk are lacking.



USDA-SOIL CONSERVATION SERVICE



MIDWEST NATIONAL TECHNICAL CENTER
LINCOLN, NEBRASKA

MIDWEST WETLAND FLORA

Field Office Illustrated Guide to Plant Species

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Introduction

This field guide was prepared by Biotic Consultants, Incorporated, of Carbondale, Illinois, under Contract #54-6526-8-303. All descriptions have been written by Robert H. Mohlenbrock. Mark Mohlenbrock prepared all of the illustrations except for the following: Miriam Meyer prepared *Glyceria striata*, *Poa annua*, *Ranunculus abortivus*, and *Ranunculus septentrionalis*; Paul Nelson prepared *Rorippa sessiliflora*, *Salix discolor*, and *Salix exigua*. All maps were prepared by Trent Mohlenbrock. Robert H. Mohlenbrock took all the photos, except the following: Rex Hamilton (*Ilex decidua*); Douglas Ladd (*Agropyron repens*, *Commelina diffusa*, *Cyperus ferruginescens*, *Cyperus rivularis*, *Leucospora multifida*, *Paspalum fluitans*, *Perilla frutescens*, *Rudbeckia laciniata*, *Rumex orbiculatus* [upper], *Silphium perfoliatum*, *Spiranthes cernua*, *Viburnum lentago*); Gary Larson (*Carex atherodes*); Steve Olson (*Plantago cordata*); Ray Schulenberg (*Polygonum amphibium* [upper]); Bill Summers (*Chenopodium album*, *Helianthus grosseserratus*, *Physostegia virginiana*, *Pilea pumila*); Robert Tatina (*Asclepias speciosa*, *Lycopus asper*, *Mentha arvensis*, *Polygonum scandens*, *Stachys palustris*); William C. Taylor (*Asclepias purpurascens* [upper], *Cardamine douglassii*, *Symplocarpus foetida*). Beverly Mohlenbrock typed all the drafts of the manuscript and assisted with the photography. Sayers Printing Company of St. Louis prepared the camera-ready copy for the entire guide. We are grateful to the Cram Map Company of Indianapolis for permission to use their base maps of the United States.

Purpose of the Guide

The swampbuster provision of the Food Security Act of 1985 requires the Soil Conservation Service to make wetland/converted wetland determinations based on the presence of hydric soils and hydrophytic vegetation. This is necessary to assist the United States Department of Agriculture program agencies in determining producer eligibility for USDA program benefits. The material contained in this illustrated wetland guide will enable persons, regardless of their botanical background, to be able to identify the plants included in this guide.

Three hundred species of vascular plants were chosen for inclusion in this guide after consultation with the Ecological Science and Planning Staff of the Soil Conservation Service Midwest Regional Technical Center in Lincoln, Nebraska. A decision was made to exclude all species that are true aquatics that live in water, because they are obvious wetland species. Also excluded were those species that most people readily recognize, such as cattail, lizard's tail, and others.

Organization and Use of the Guide

The presentation of each of the 300 species is included on two pages. The plants are arranged by groups. Within each group they are further arranged alphabetically by genus, and then alphabetically by species within each genus. The front of each page gives the common and scientific names of the plant, following the National Wetland Plant List prepared by the United States Fish and Wildlife Service in 1987. The scientific name consists of two Latin names. The first is called the genus name, the second is the species. After these two Latin names is one or more abbreviation(s) that stand for the name (or names) of the botanist(s) who first gave the plant its correct name. These abbreviated names are referred to as the authority. This is followed by a statement indicating the months of the year that the flower is in bloom. Under the category entitled Field Marks is the combination of characters that distinguishes the species from any others. The remainder of the front side of the page has a black-and-white illustration of the entire plant along with a close-up illustration of one of the parts of the plant.

On the back of each page is one or more colored photograph(s) of the species and a map showing the distribution of the species in the United States. The distribution map was compiled after consultation of all existing floras of the United States. The map gives only a general range of the species. A state which is completely covered by the pattern does not necessarily mean that the plant occurs in every county, although it might be expected in every county.

The remainder of the back of the page is devoted to a description of the plant, including characteristics of the growth form, stems, leaves, flowers (sepals, petals, stamens, pistils), fruits, and seeds. Useful or other features of the plant are included under Notes.

To use the guide, one identifies the plant to group, either with the key or from experience and prior knowledge, and then refers to the plant description. If the plant is not encountered in the descriptions, it is obviously not covered by this guide, and the investigator must consult other references.

GLOSSARY

Achene. A one-seeded, dry, indehiscent fruit with the seed coat not attached to the mature ovary wall.

Annual. Living only for one year.

Awn. A bristle-like process.

Berry. A fruit with the seeds surrounded only by fleshy material.

Biennial. Living for two years.

Bract. An accessory structure at the base of some flowers, usually appearing leaflike.

Bracteole. A secondary bract.

Bristle. A stiff hair.

Capsule. A dry, dehiscent fruit splitting into 3 or more parts.

Ciliate. Bearing marginal hairs.

Clasping. Said of leaves that partially encircle the stem at the base.

Corolla. All the petals of a flower.

Cyme. A type of inflorescence in which the central flowers open first.

Dehiscent. Splitting at maturity.

Drupe. A fruit with the seed surrounded by a hard, dry covering which, in turn, is surrounded by fleshy material.

Ellipsoid. Referring to a solid object that is broadest at the middle, gradually tapering to both ends.

Elliptic. Broadest at the middle, gradually tapering to both ends.

Fibrous. Referring to a cluster of slender roots, all with the same diameter.

Filament. The stalk of a stamen.

Follicle. A dry, dehiscent fruit that splits along one side at maturity.

Glaucous. Having a bluish appearance.

Glume. A sterile scale found in grasses.

Indehiscent. Not splitting open at maturity.

Inferior. Referring to the position of the ovary when it is below the point of attachment of the sepals and petals.

Inflorescence. A cluster of flowers.

Lanceolate. Lance-shaped; broadest near the base, gradually tapering to the narrower apex.

Lanceoloid. Referring to a solid object that is broadest near the base, gradually tapering to the narrower apex.

Lemma. A fertile scale found in grasses.

Linear. Elongated and uniform in width throughout.

Nutlet. A small nut.

Oblanceolate. Reverse lance-shaped; broadest at the apex, gradually tapering to the narrower base.

Oblong. Broadest at the middle, and tapering to both ends, but broader than elliptic.

Oblongoid. Referring to a solid object that, in side view, is nearly the same width throughout.

Obovate. Broadly rounded at the apex, becoming narrowed below.

Obovoid. Referring to a solid object that is broadly rounded at the apex, becoming narrowed below.

Orbicular. Round.

Ovary. That part of the pistil that contains the ovules.

Ovate. Broadly rounded at the base, becoming narrowed above; broader than lanceolate.

Ovoid. Referring to a solid object that is broadly rounded at the base, becoming narrowed above.

Ovule. Immature seed.

Palmate. Divided radiately, like the fingers of a hand.

Panicle. An arrangement of flowers consisting of several racemes.

Perennial. Living for 3 or more years.

Perianth. All the sepals and petals of a flower.

Perigynium. A sac-like structure enclosing the pistil in *Carex*.

Pinnate. Divided once along an elongated axis into distinct segments.

Pistil. The ovule-producing part of the flower.

Prostrate. Lying flat on the ground.

Raceme. A grouping of flowers along an elongated axis where each flower has its own stalk.

Receptacle. That part of the flower to which the sepals, petals, stamens, and pistils are usually attached.

Rhizome. An underground, horizontal stem.

Samara. An indehiscent winged fruit.

Scale. A tiny, leaflike structure; the structure that subtends each flower in a grass or sedge.

Spadix. A fleshy axis in which flowers are embedded.

Spathe. A large bract subtending or sometimes enclosing a cluster of flowers.

Spike. A grouping of flowers along an elongated axis where each flower lacks a stalk.

Spikelet. A small spike.

Stamen. The pollen-producing organ of a flower.

Stigma. The terminal part of a pistil.

Stolon. A horizontal stem lying on the surface of the soil.

Style. That part of the pistil between the ovary and the stigma.

Succulent. Fleshy.

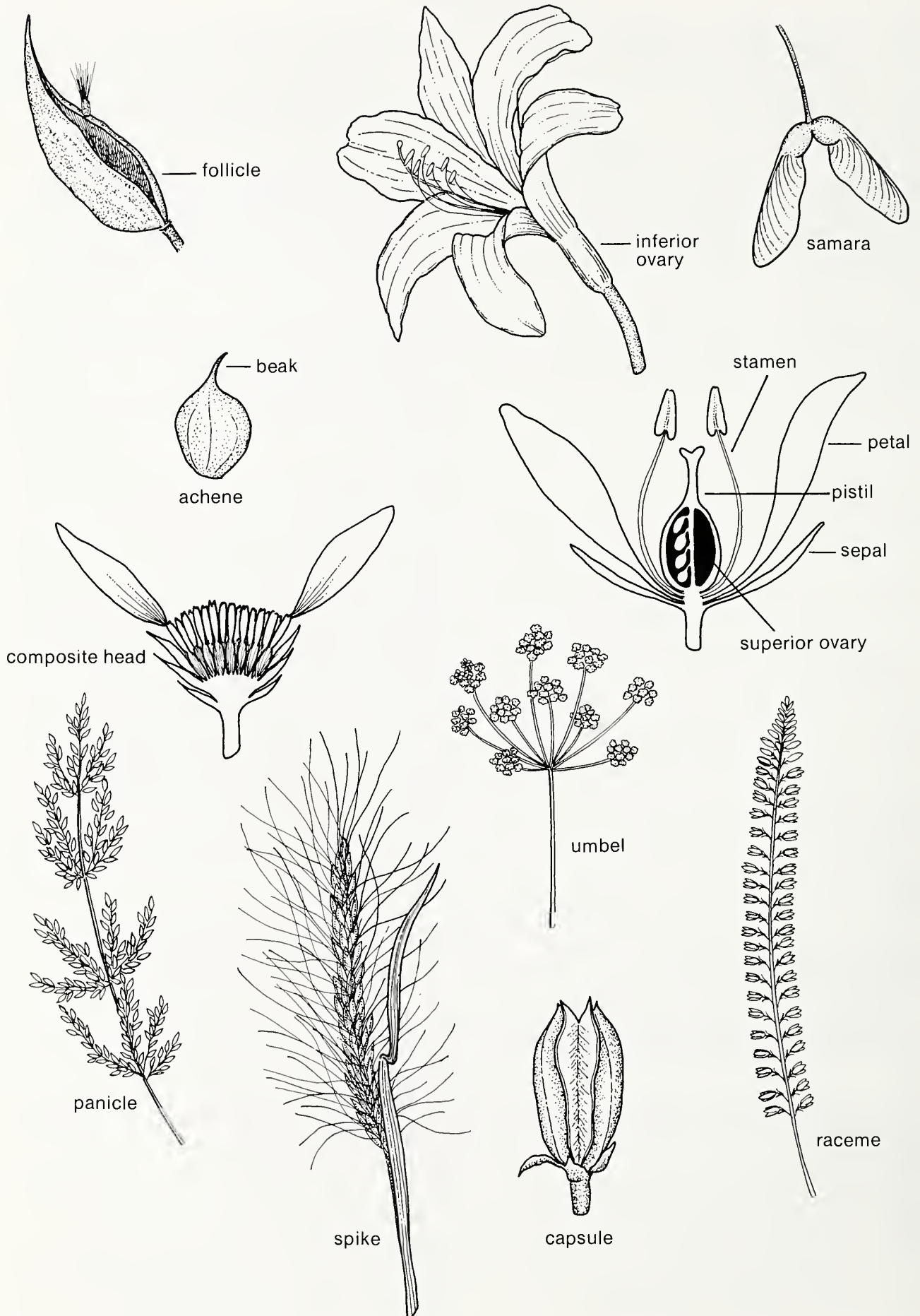
Superior. Referring to the position of the ovary when it is above the point of attachment of the sepals, petals, stamens, and pistils.

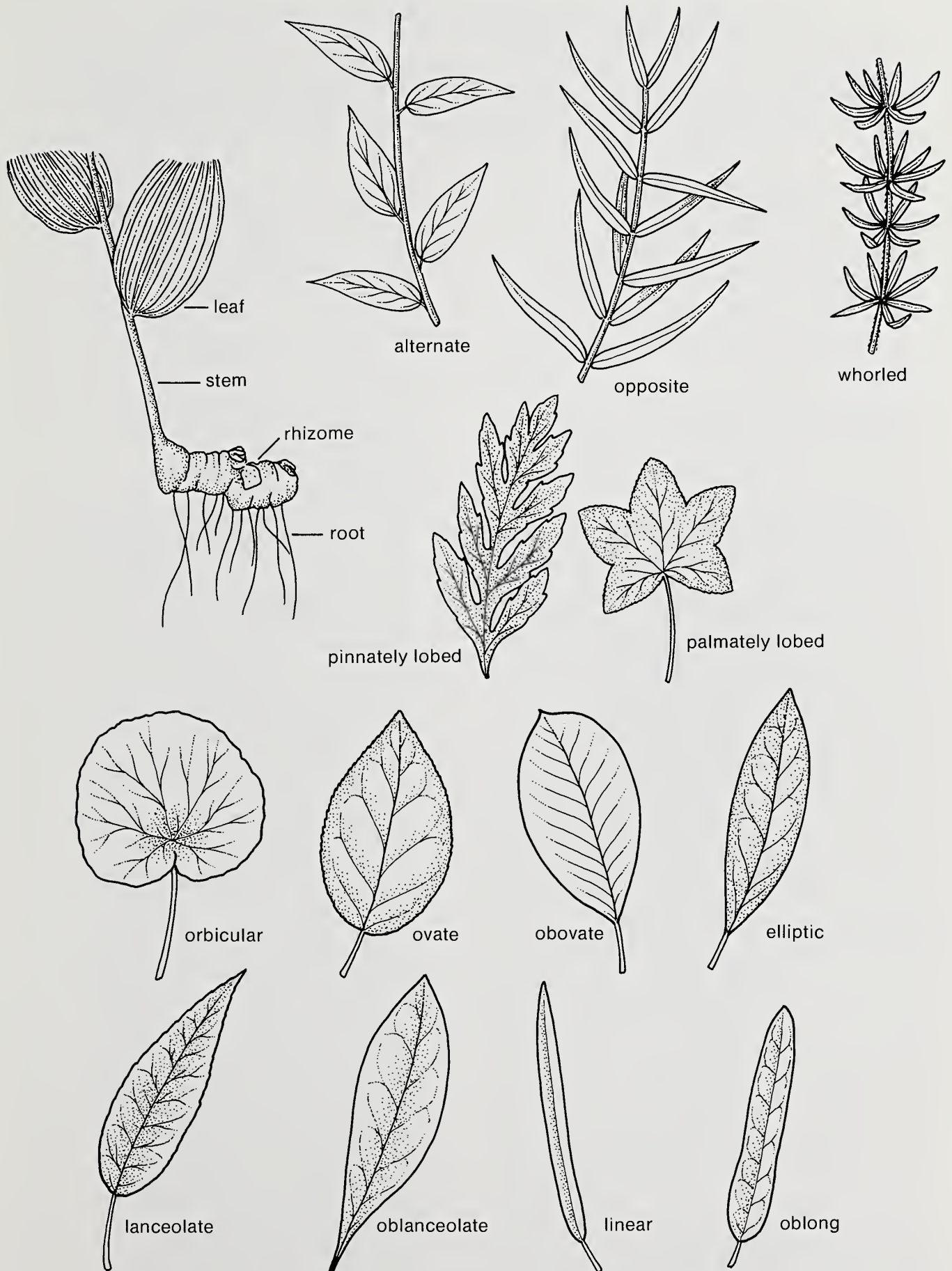
Tubercle. A wart-like process.

Umbel. A cluster of flowers in which the flower stalks arise from the same level.

Valve. The wing of the fruit in *Rumex*.

Whorl. An arrangement of 3 or more structures at a point on the stem.





List of Midwestern Wetland Flora in This Project

The 300 Midwestern wetland plants selected for this project are given in the following list. The list is arranged by groups as found in the key to groups. Within each group the plants are arranged alphabetically first by the scientific name of the genus, then alphabetically by species within the genus. The scientific and common names are those given in the Wetland Inventory List by the United States Fish and Wildlife Service, 1987.

Group 1. Ferns and Horsetails

Cystopteris bulbifera - Berry Bladderfern
Equisetum arvense - Field Horsetail
Equisetum hyemale - Scouringrush Horsetail
Equisetum laevigatum - Smooth Horsetail
Osmunda regalis - Royal Fern
Thelypteris thelypteroides - Marsh Fern

Group 2. Grasses

Agropyron repens - Quackgrass
Agropyron smithii - Western Wheatgrass
Agrostis alba - Redtop
Alopecurus carolinianus - Carolina Foxtail
Arundinaria gigantea - Giant Cane
Calamagrostis canadensis - Bluejoint
Chasmanthium latifolium - Broadleaf Uniola
Cinna arundinacea - Stout Woodreed
Dichanthelium acuminatum - Woolly Panicum
Dichanthelium clandestinum - Deertongue Dichanthelium
Echinochloa crusgalli - Barnyard Grass
Echinochloa muricata - Wild Millet
Elymus canadensis - Canada Wildrye
Elymus virginicus - Virginia Wildrye
Eragrostis hypnoides - Teal Lovegrass
Festuca arundinacea - Tall Fescue
Festuca pratensis - Meadow Fescue
Glyceria striata - Fowl Mannagrass
Hordeum jubatum - Foxtail Barley
Hordeum pusillum - Little Barley
Leersia oryzoides - Rice Cutgrass
Leersia virginica - Whitegrass
Panicum rigidulum - Redtop Panicum
Paspalum floridanum - Florida Paspalum
Paspalum fluitans - Water Paspalum
Paspalum laeve - Field Paspalum
Phalaris arundinacea - Reed Canarygrass
Phragmites australis - Common Reed
Poa annua - Annual Bluegrass
Poa compressa - Canada Bluegrass
Poa pratensis - Kentucky Bluegrass
Setaria faberi - Faber Bristlegrass
Setaria glauca - Yellow Foxtail
Spartina pectinata - Prairie Cordgrass
Sphenopholis obtusata - Prairie Wedgegrass

Group 3. Sedges

Carex atherodes - Slough Sedge
Carex blanda - Woodland Sedge
Carex bushii - Bush Sedge

Carex comosa - Longhair Sedge
Carex crinita - Fringed Sedge
Carex cristatella - Crested Sedge
Carex crus-corvi - Crowfoot Sedge
Carex festucacea - Fescue Sedge
Carex flaccosperma - Thin-fruited Sedge
Carex frankii - Frank's Sedge
Carex granularis - Meadow Sedge
Carex grayi - Gray's Sedge
Carex hyalinolepis - Thinscale Sedge
Carex interior - Inland Sedge
Carex lanuginosa - Bull Sedge
Carex lupulina - Hop Sedge
Carex lurida - Lurid Sedge
Carex molesta - Troublesome Sedge
Carex muskingumensis - Muskingum Sedge
Carex normalis - Larger Straw Sedge
Carex projecta - Beaded Broom Sedge
Carex scoparia - Broom Sedge
Carex shortiana - Short's Sedge
Carex squarrosa - Squarrose Sedge
Carex stipata - Sawbeak Sedge
Carex tenera - Slender Sedge
Carex tribuloides - Bristlebract Sedge
Carex typhina - Cattail Sedge
Carex vulpinoidea - Fox Sedge
Cyperus acuminatus - Taperleaf Flatsedge
Cyperus erythrorhizos - Redroot Flatsedge
Cyperus esculentus - Chufa Flatsedge
Cyperus ferruginescens - Rusty Flatsedge
Cyperus flavescens - Yellow Flatsedge
Cyperus odoratus - Fragrant Flatsedge
Cyperus pseudovegetus - Green Flatsedge
Cyperus rivularis - Slender Flatsedge
Cyperus strigosus - Strawcolored Nutsedge
Dulichium arundinaceum - Three-way Sedge
Eleocharis acicularis - Needle Spikerush
Eleocharis compressa - Flat-stemmed Spikerush
Eleocharis obtusa - Blunt Spikerush
Eleocharis palustris - Creeping Spikerush
Eleocharis quadrangulata - Squarestem Spikerush
Eleocharis smallii - Small's Spikerush
Hemicarpha micrantha - Common Hemicarpha
Scirpus acutus - Hardstem Bulrush
Scirpus americanus - Olney's Bulrush
Scirpus atrovirens - Green Bulrush
Scirpus cyperinus - Woolgrass
Scirpus fluviatilis - River Bulrush
Scirpus pendulus - Reddish Bulrush
Scirpus validus - Softstem Bulrush

Group 4. Other Monocots

Alisma plantago-aquatica - Common Waterplantain
Camassia scilloides - Atlantic Camass
Commelina communis - Common Dayflower
Commelina diffusa - Spreading Dayflower
Commelina virginica - Virginia Dayflower
Hymenocallis occidentalis - Northern Spiderlily
Hypoxis hirsuta - Common Goldstargrass
Juncus acuminatus - Tapertip Rush
Juncus biflorus - Twinflower Rush
Juncus brachycarpus - Short-fruited Rush
Juncus effusus - Soft Rush
Juncus interior - Inland Rush
Juncus nodosus - Jointed Rush
Juncus tenuis - Slender Rush
Juncus torreyi - Torrey Rush
Spiranthes cernua - Nodding Ladies' Tresses
Symplocarpus foetidus - Skunk Cabbage

Group 5. Trees or Shrubs

Alnus serrulata - Hazel Alder
Amorpha fruticosa - Dull-leaf Indigo
Betula nigra - River Birch
Betula pumila - Low Birch
Carpinus caroliniana - American Hornbeam
Carya illinoensis - Common Pecan
Carya laciniosa - Shellbark Hickory
Carya ovata - Shagbark Hickory
Celtis laevigata - Sugarberry
Celtis occidentalis - Common Hackberry
Cephalanthus occidentalis - Button Bush
Chamaedaphne calyculata - Leatherleaf
Cornus foemina - Gray Dogwood
Cornus stolonifera - Red-osier Dogwood
Decodon verticillatus - Water Willow
Forestiera acuminata - Swamp Privet
Fraxinus pennsylvanica - Green Ash
Ilex decidua - Possumhaw Holly
Ilex verticillata - Winterberry
Potentilla fruticosa - Shrubby Cinquefoil
Prunus virginiana - Common Chokecherry
Quercus bicolor - Swamp White Oak
Quercus macrocarpa - Bur Oak
Quercus michauxii - Swamp Chestnut Oak
Quercus shumardii - Shumard Oak
Rosa palustris - Swamp Rose
Salix amygdaloides - Peachleaf Willow
Salix candida - Hoary Willow
Salix discolor - Pussy Willow
Salix exigua - Sandbar Willow
Salix nigra - Black Willow
Sambucus canadensis - American Elder
Viburnum lentago - Nannyberry
Viburnum prunifolium - Black Haw
Viburnum recognitum - Arrow-wood

Group 6. Dicot Herbs with Some Leaves Compound

Agrimonia parviflora - Small-flowered Agrimony
Apios americana - American Potatobean
Barbarea vulgaris - Bitter Wintercress
Bidens aristosa - Tickseed Sunflower
Bidens frondosa - Devils Beggarticks
Cardamine pensylvanica - Pennsylvania Bittercress
Cassia marilandica - Maryland Senna
Chaerophyllum procumbens - Spreading Chervil
Cicuta maculata - Spotted Waterhemlock
Corydalis flavula - Yellow Corydalis
Geum vernum - Spring Avens
Leucospora multifida - Narrow-leaved Paleseed
Lotus corniculatus - Birdsfoot Trefoil
Oxypolis rigidior - Cowbane
Ranunculus abortivus - Subalpine Buttercup
Ranunculus septentrionalis - Swamp Buttercup
Senecio glabellus - Butterweed
Sium suave - Waterparsnip

Group 7. Dicot Herbs with Most Leaves Simple and Opposite

Agalinis purpurea - Purple Gerardia
Ambrosia artemisiifolia - Common Ragweed
Ambrosia trifida - Giant Ragweed
Ammannia coccinea - Purple Ammannia
Apocynum cannabinum - Indianhemp Dogbane
Asclepias incarnata - Swamp Milkweed
Asclepias purpurascens - Purple Milkweed
Asclepias speciosa - Showy Milkweed
Bacopa rotundifolia - Disk Water Hyssop
Bidens cernua - Nodding Beggarticks
Boehmeria cylindrica - False Nettle
Chelone glabra - White Turtlehead
Conoclinium coelestinum - Mistflower
Diodia virginiana - Virginia Buttonweed
Eclipta alba - Yerba de Tajo
Eupatoriadelphus fistulosus - Purplestem Joepyeweed
Eupatorium perfoliatum - Boneset
Galium obtusum - Bluntleaf Bedstraw
Galium tinctorium - Dye Bedstraw
Galium trifidum - Small Bedstraw
Gentianopsis crinita - Fringed Gentian
Gratiola neglecta - Clammy Hedge-hyssop
Helianthus grosseserratus - Sawtooth Sunflower
Iva annua - Rough Sumpweed
Krigia cespitosa - Dwarf Dandelion
Lindernia anagallidea - False Pimpernel
Lindernia dubia - Moistbank Pimpernel
Ludwigia palustris - Marsh Purslane
Lycopus americanus - American Bugleweed
Lycopus asper - Rough Bugleweed
Lycopus rubellus - Stalked Water Horehound

Lycopus virginicus - Virginia Bugleweed
Lysimachia ciliata - Fringed Loosestrife
Lysimachia lanceolata - Lanceleaf Loosestrife
Lysimachia nummularia - Moneywort Loosestrife
Lysimachia thyrsoflora - Water Loosestrife
Lythrum salicaria - Purple Loosestrife
Mentha arvensis - Field Mint
Mimulus alatus - Sharp-winged Monkey-flower
Mollugo verticillata - Carpetweed
Penstemon digitalis - Foxglove Beardtongue
Perilla frutescens - Beefsteak Plant
Phlox glaberrima - Smooth Phlox
Phlox paniculata - Garden Phlox
Phyla lanceolata - Fog-fruit
Physostegia virginiana - False Dragon-head
Pilea pumila - Clearweed
Prunella vulgaris - Common Selfheal
Pycnanthemum tenuifolium - Slender Mountain-mint
Rhexia mariana - Maryland Meadow Beauty
Rotala ramosior - Tooth-cup
Ruellia strepens - Smooth Ruellia
Sabatia angularis - Rose-pink
Ruellia strepens - Smooth Ruellia
Sabatia angularis - Rose-pink
Scutellaria lateriflora - Blue Skullcap
Silphium perfoliatum - Cup-plant
Spermacoce glabra - Smooth Buttonweed
Stachys palustris - Woundwort
Stachys tenuifolia - Smooth Hedge Nettle
Teucrium canadense - Canada Germander
Triadenum walteri - Marsh St. Johnswort
Verbena hastata - Blue Vervain
Veronica peregrina - Purslane Speedwell
Veronicastrum virginicum - Culver's-root

Group 8. Dicot Herbs with Most Leaves Simple and Alternate

Amaranthus albus - Amaranth Tumbleweed
Amaranthus retroflexus - Red Root Amaranth
Amaranthus rudis - Nuttall's Waterhemp
Amsonia tabernaemontana - Willow Amsonia
Aster junciformis - Rush Aster
Aster lateriflorus - Calico Aster
Aster novae-angliae - New England Aster
Aster simplex - Whitefield Aster
Aster vimineus - Fairy Aster
Boltonia asteroides - Marsh Boltonia
Calystegia sepium - Hedge Bindweed
Campanula americana - American Bellflower
Cardamine bulbosa - Spring Cress
Cardamine douglassii - Purple Cress
Chenopodium album - Lambsquarter
Cycloloma atriplicifolium - Winged Pigweed
Epilobium coloratum - Purpleleaf Willowweed
Erigeron annuus - Annual Fleabane

Erigeron philadelphicus - Philadelphia Fleabane
Erigeron pulchellus - Robin's Plantain
Erigeron strigosus - Rough Fleabane
Eriophorum angustifolium - Narrowleaf Cottonsedge
Euthamia graminifolia - Grass-leaved Goldenrod
Helenium autumnale - Sneezeweed
Helenium flexuosum - Purple-headed Sneezeweed
Heracleum lanatum - Cowparsnip
Hibiscus laevis - Halberd-leaved Rosemallow
Impatiens capensis - Spotted Touch-me-not
Ipomoea lacunosa - Small White Morning-glory
Laportea canadensis - Canada Woodnettle
Lobelia cardinalis - Cardinalflower
Lobelia siphilitica - Bigblue Lobelia
Ludwigia alternifolia - Seedbox
Lythrum alatum - Winged Lythrum
Myosurus minimus - Tiny Mouse-tail
Oenothera biennis - Common Evening Primrose
Oenothera pilosella - Prairie Sundrops
Parietaria pensylvanica - Pennsylvania Pellitory
Penthorum sedoides - Ditch-stonecrop
Phacelia ranunculacea - Coville's Phacelia
Plantago cordata - Heartleaf Plantain
Pluchea camphorata - Stinkweed
Polygonum amphibium - Water Smartweed
Polygonum amphibium var. *coccineum* - Scarlet Smartweed
Polygonum cespitosum - Cespitose Knotweed
Polygonum hydropiperoides - Mild Water Pepper
Polygonum pensylvanicum - Pinkweed
Polygonum sagittatum - Arrow-leaved Tear-thumb
Polygonum scandens - Climbing False Buckwheat
Polygonum setaceum - Bristly Smartweed
Proserpinaca palustris - Mermaid Weed
Ranunculus laxicaulis - Spearwort
Ranunculus pusillus - Low Spearwort
Ranunculus recurvatus - Hooked Buttercup
Ranunculus sceleratus - Celeryleaf Buttercup
Rorippa sessiliflora - Sessile-flowered Cress
Rorippa sylvestris - Creeping Yellow-cress
Rudbeckia laciniata - Tall Coneflower
Rumex altissimus - Pale Dock
Rumex crispus - Curly Dock
Rumex orbiculatus - Great Water Dock
Rumex verticillatus - Swamp Dock
Saxifraga pensylvanica - Pennsylvania Saxifrage
Senecio aureus - Golden Ragwort
Sicyos angulatus - Bur Cucumber
Solidago flexicaulis - Zigzag Goldenrod
Solidago gigantea - Late Goldenrod
Solidago patula - Roughleaf Goldenrod
Solidago uliginosa - Bog Goldenrod
Sonchus asper - Prickly Sowthistle
Verbesina alternifolia - Yellow Ironweed
Vernonia missurica - Ironweed
Xanthium strumarium - Cocklebur

Key to Groups of Wetland Plants in Midwest

1. Ferns or horsetails, reproducing by spores, not seeds Group 1
1. Plants reproducing by flowers and seeds 2
 2. Monocots; leaves usually with parallel veins; flower parts usually in 3's or multiples 3
 2. Dicots; leaves usually with net veins; flower parts usually in 4's or 5's or multiples 5
3. Flowers without sepals and petals, each flower subtended by a scale, with all the flowers arranged in spikelets 4
3. Flowers with sepals and petals (green or brown in *Juncus*), or borne on a spadix, but not arranged in spikelets Group 4
 4. At least one or more scales at the base of each spikelet not subtending a flower; stems never triangular Group 2
 4. All the scales of a spikelet subtending a flower; stems sometimes triangular Group 3
5. Trees or shrubs; stems woody Group 5
5. Herbs; stems not woody 6
 6. At least some of the leaves compound; that is, divided into distinct leaflets Group 6
 6. None of the leaves compound 7
7. Most or all the leaves opposite or whorled Group 7
7. Most or all the leaves alternate Group 8

GROUP 1

Ferns and Horsetails

Berry Bladderfern
Cystopteris bulbifera (L.) Bernh.

Family: Fern (Polypodiaceae)

Spores: June-September

Field Marks: This fern possesses asexual bulblets on the under surface of the leaves, in addition to the rounded sori.





Local Notes:



Habitat: Moist, rocky woods, usually in limestone areas.

Habit: Herbaceous fern with thickened rootstocks.

Stems: The only stems are underground.

Leaves: Pale green, 2 1/2 times pinnately compound, up to 2 feet long, each segment toothed, hairy; small bulblets sometimes formed on the lower leaf surface which fall to the ground and may develop into a new plant.

Leaf Stalks: Straw-colored, with transparent scales, up to 6 inches long.

Reproductive Bodies: Round, scattered over the lower leaf surface.

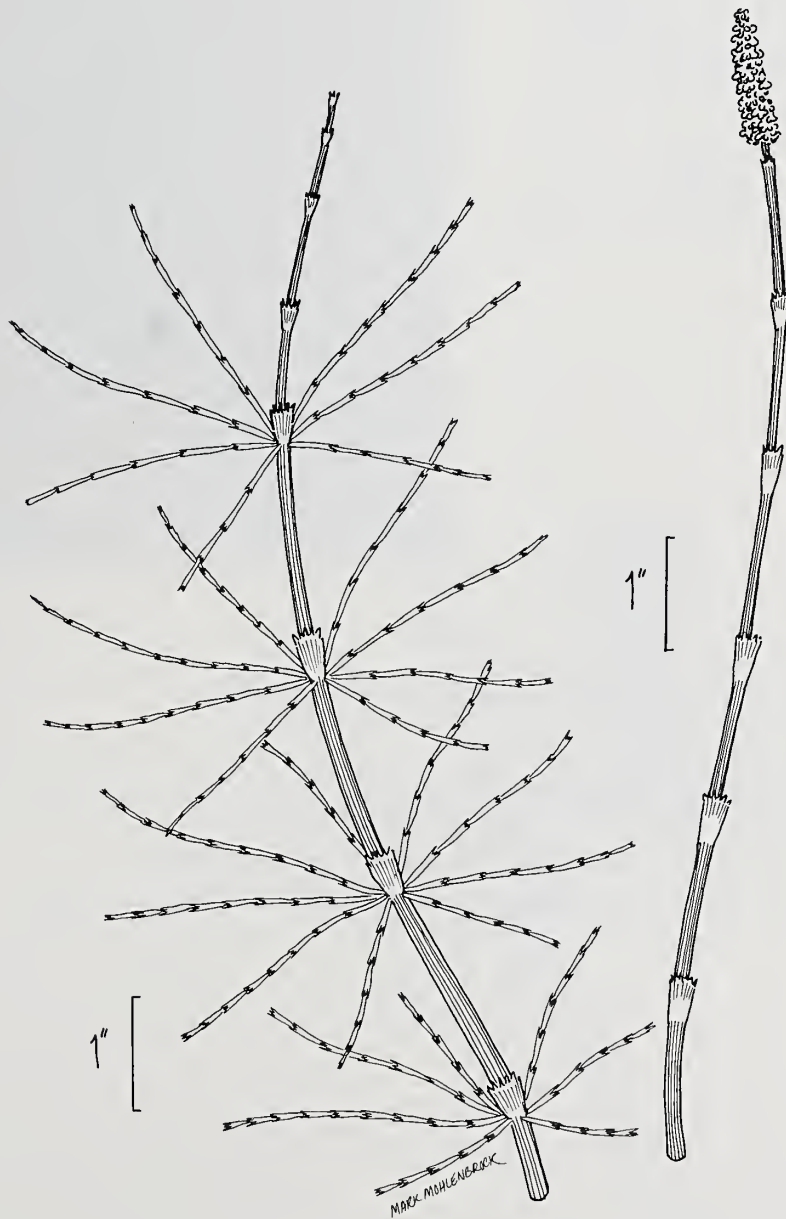
Field Horsetail

Equisetum arvense L.

Family: Horsetail (Equisetaceae)

Spores: May

Field Marks: This *Equisetum* has many slender stems arising from the main stem in whorls.





Local Notes:



Habitat: Along streams, wet ground; common in railroad ballast.

Habit: Annual herb.

Stems: Of 2 kinds: the cone-bearing stem unbranched, brownish, to 10 inches tall; the sterile stems up to 2 feet tall, green, with whorls of slender branches.

Leaves: Reduced to whorls of slender teeth at each joint on the stem.

Cones: Borne at the tips of unbranched stems, narrowly ovoid, up to 1 inch long.

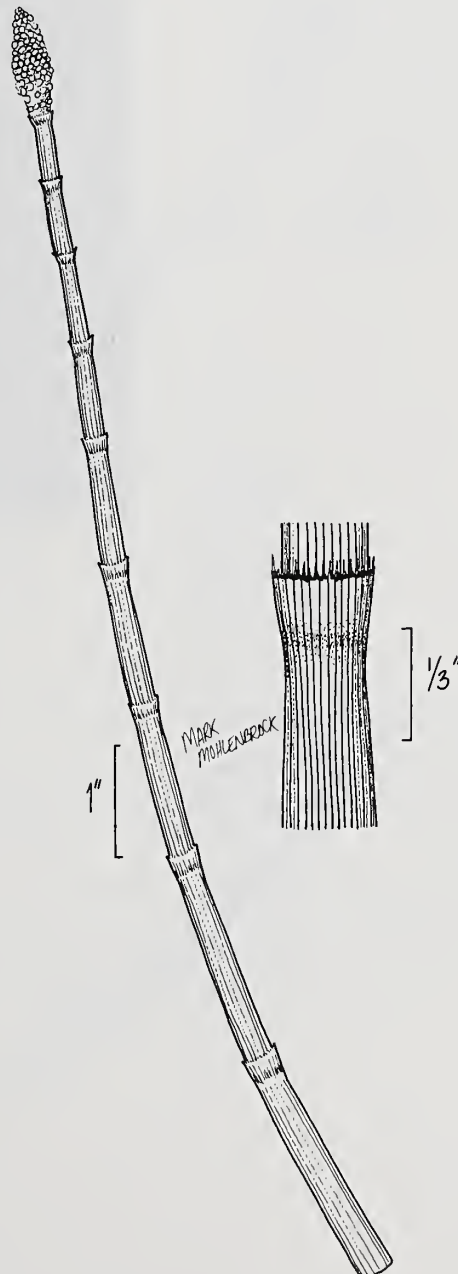
Scouringrush Horsetail

Equisetum hyemale L.

Family: Horsetail (Equisetaceae)

“Cones” in May-September

Field Marks: This *Equisetum* lacks lateral branches, sheds its tiny scale-like teeth on the sheaths during the growing season, and has a “cone” usually at least 1/2 inch long.





Local Notes:



Habitat: Along streams, roadsides and railroads, alluvial soil.

Habit: Perennial with black rhizomes.

Stems: Erect, usually unbranched, jointed, green, grooved, slightly rough to the touch, up to 4 feet tall, evergreen.

Leaves: Reduced to a ring of teeth at each joint on the stem, the teeth black and falling away during the growing season.

Fruits: Spores borne in terminal "cones" 1/2-1 inch long, pointed at the tip.

Notes: This species was used by the early settlers to scour and clean pots and pans.

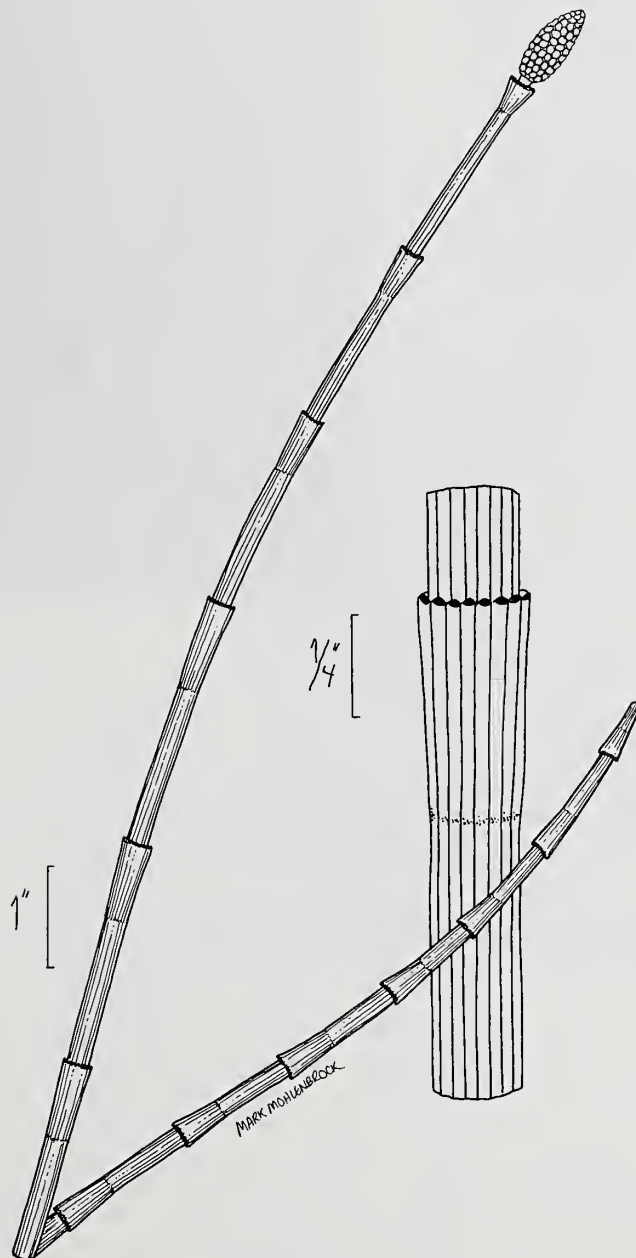
Smooth Horsetail

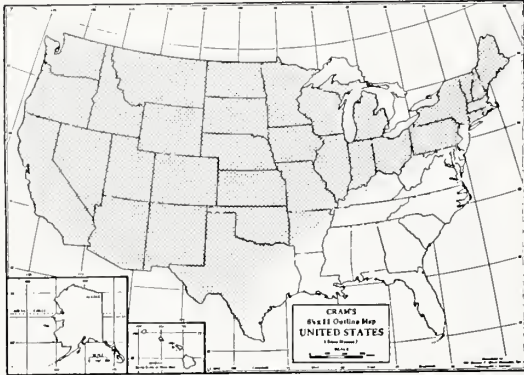
Equisetum laevigatum A. Braun

Family: Horsetail (Equisetaceae)

Spores: March-July

Field Marks: This horsetail is distinguished by its nearly smooth stems and its pointed cones.





Local Notes:



Habitat: Along streams.

Habit: Perennial herb.

Stems: Erect, green, jointed, grooved, smooth, up to 5 feet tall.

Leaves: Reduced to tiny, black teeth with white borders, triangular scales encircling the stem at each joint.

Reproductive Bodies: Arranged in solitary cones at the tip of each stem, the cones up to 1 inch long, pointed at the tip.

Royal Fern

Osmunda regalis L.

Family: Osmunda (Osmundaceae)

Spores: July-September

Field Marks: This fern is recognized by its smooth, twice-pinnate, finely toothed leaves and its reproductive structures borne on separate branches from the leaves.





Local Notes:



Habitat: In springs, along creeks, in bogs; also on sandstone ledges.

Habit: Perennial, evergreen herb with stout rootstocks.

Stems: Entirely underground.

Leaves: Twice pinnately divided, up to 3 feet long, smooth; the individual leaflets oblong, finely toothed, at least near the tip, often somewhat asymmetrical at the base.

Reproductive Bodies: Borne on branches separate from the leaves but arising at the base of the leaves.

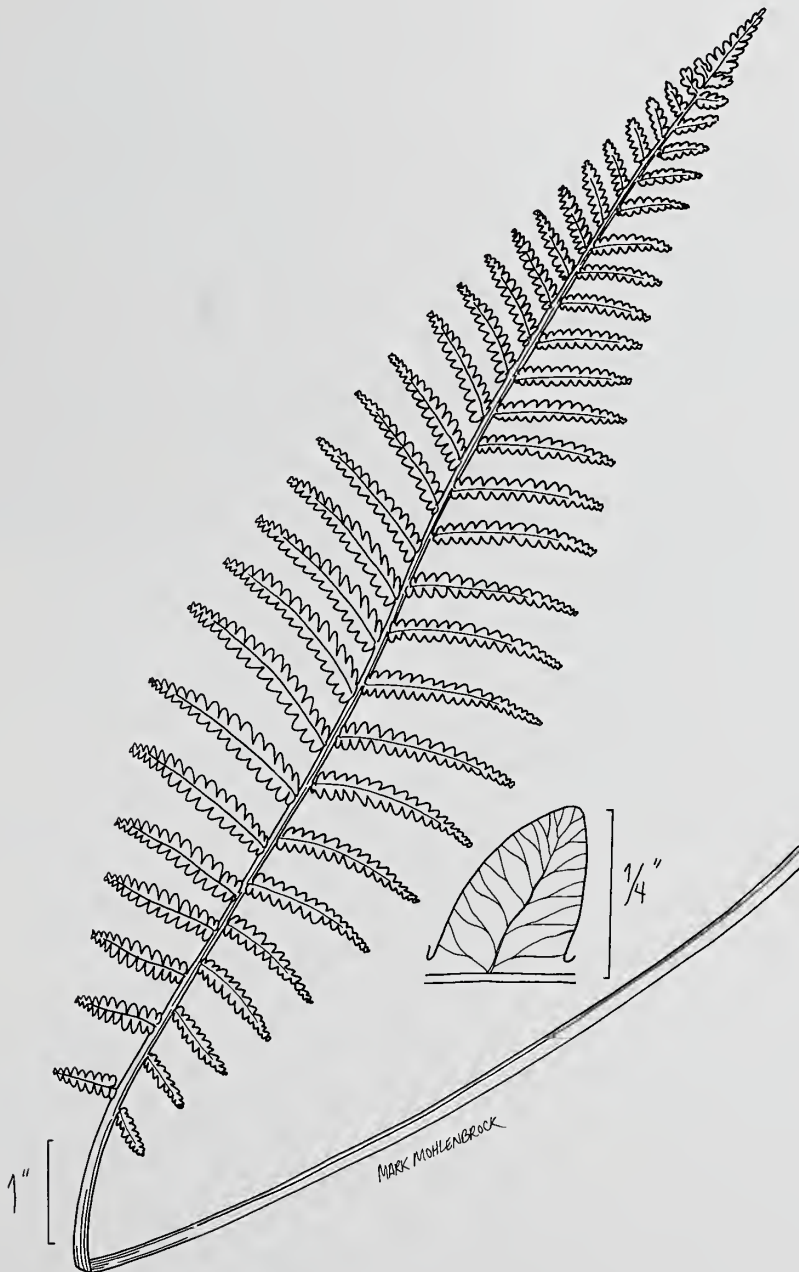
Marsh Fern

Thelypteris thelypteroides (Michx.) J. Holub

Family: Fern (Polypodiaceae)

Fruiting: June-October

Field Marks: This is a deciduous fern that grows in marshy soils. The leaves are divided 1 1/2 times.





Local Notes:



Habitat: Marshes, wet woods.

Habit: Perennial herb with slender, creeping, black rhizomes.

Stems: No aerial stems present.

Leaves: Deciduous, lanceolate, covered with short hairs, at least when young, divided 1 1/2 times into tiny, more or less toothless segments with forking veins.

Reproductive Bodies: Circular, along the edges of the leaf segments.

Notes: Marsh fern is usually known as *Thelypteris palustris*.

GROUP 2

Grasses

Quackgrass

Agropyron repens (L.) Beauv.

Family: Grass (Poaceae)

May-September

Field Marks: Quackgrass is distinguished from other species of *Agropyron* by having creeping underground rootstocks and by its spikelets that have only 3-6 flowers.





Local Notes:



Habitat: Fields, roadsides, disturbed areas.

Habit: Perennial herb with whitish, creeping underground rootstocks.

Stems: Erect, smooth, up to 4 feet tall.

Leaves: Up to 12 inches long, up to 1/2 inch broad, smooth on the upper surface, rough on the lower surface, with smooth sheaths.

Flowers: 3-6 per spikelet, with several spikelets forming erect spikes up to 8 inches long; spikelets up to 3/4 inch long, with pointed or short-awned scales that have 5 or 7 conspicuous veins.

Stamens: 3.

Pistils: Ovary superior.

Grains: Hairy at the tip.

Western Wheatgrass

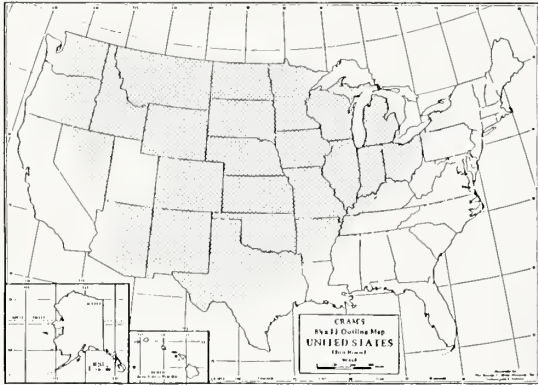
Agropyron smithii Rydb.

Family: Grass (Poaceae)

May-August

Field Marks: *Agropyron smithii* has rhizomes and blue-green leaves, some of which have inrolled margins. The spikelets usually have 6 or more flowers.





Local Notes:



Habitat: Fields, prairies; along railroads.

Habit: Perennial grass with extensive creeping rhizomes.

Stems: Erect, up to 4 feet tall, pale green to bluish, smooth.

Leaves: Elongated, narrow, erect, up to 1/3 inch broad, rough to the touch on the upper surface, without hairs, the edges rolling inward as they dry.

Flowers: Several in spikelets, with numerous spikelets crowded along either side of the main axis and placed sideways along the axis, up to 1 inch long, 6- to 12-flowered, the lemmas up to 1/2 inch long, pointed or even short-awned at the tip, smooth or slightly hairy.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Grains slightly hairy at the tip.

Notes: This is a heavily grazed grass in the Great Plains. It is an important hay plant.

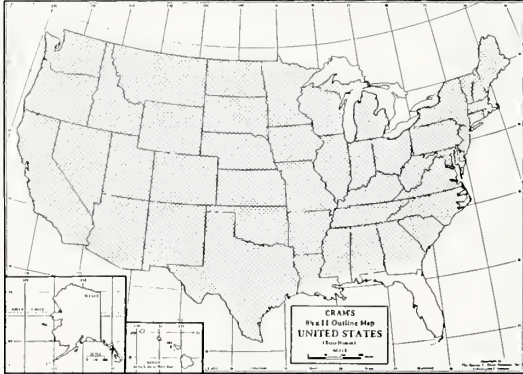
Redtop
Agrostis alba L.

Family: Grass (Poaceae)

June-August

Field Marks: Species of *Agrostis* are distinguished by their 1-flowered spikelets borne on thread-like branches. This species is further distinguished by its leaves at least 1/8 inch broad and its slender rhizomes.





Local Notes:



Habitat: Wet meadows, wet prairies, along streams, roadside ditches.

Habit: Perennial grass with extensive slender rhizomes.

Stems: Erect or spreading, usually unbranched, smooth, up to 2 feet tall.

Leaves: Elongated, narrow, rough to the touch, 1/8 to 1/4 inch broad.

Flowers: Borne in 1-flowered spikelets, with many spikelets on thread-like branches in panicles up to 10 inches long; each spikelet up to 1/12 inch long, green or purplish.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Ellipsoid, reddish, about 1/20 inch long.

Notes: The dense network of rhizomes enables this species to be a good soil binder.

Carolina Foxtail

Alopecurus carolinianus Walter

Family: Grass (Poaceae)

April-August

Field Marks: This small grass is distinguished by its soft, erect, unbranched spikes and its annual habit.





Local Notes:



Habitat: Fallow fields, roadside ditches, around ponds, wet meadows, in sloughs.

Habit: Annual herb with fibrous roots.

Stems: Spreading or erect, sometimes branched, smooth or nearly so, up to 1 foot tall.

Leaves: Narrow but rather short, up to 3 inches long, up to 1/10 inch broad, rough to the touch.

Flowers: Borne in 1-flowered spikelets, with many spikelets crowded into a rather soft spike at the tip of the stem, the spikes up to 3 inches long; spikelets about 1/12 inch long, the scales rounded or somewhat pointed at the tip, smooth, with a slender awn arising near the base of the scale and protruding out of the spike.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; styles 2.

Grains: Very tiny, elongated, smooth.

Giant Cane

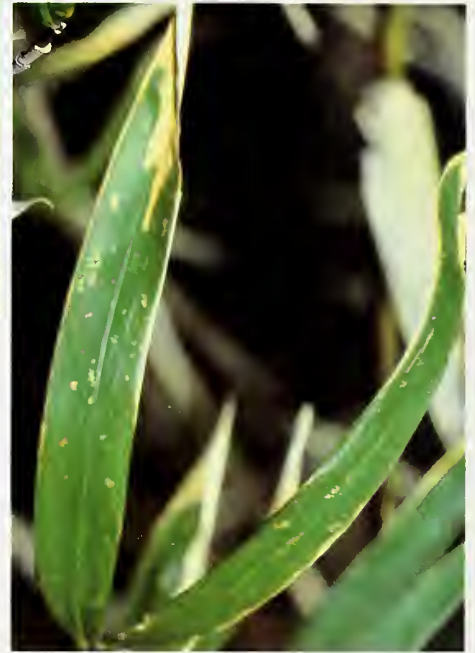
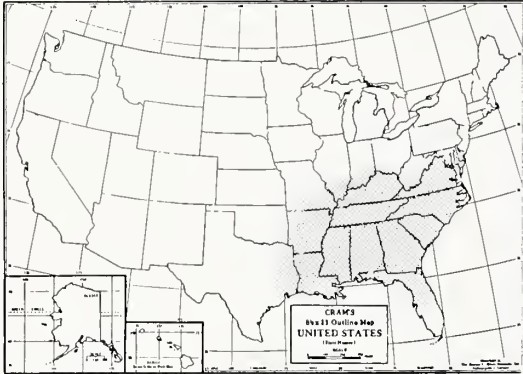
Arundinaria gigantea (Walter) Walter

Family: Grass (Poaceae)

April-May

Field Marks: This is the only grass with woody stems, these sometimes attaining a height of 14 feet.





Local Notes:

Habitat: Along streams.

Habit: Woody-stemmed grass with rhizomes.

Stems: Erect, woody, unbranched, smooth, hollow, up to 14 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, smooth or rough to the touch, up to 12 inches long, up to 3/4 inch broad.

Flowers: 7 or more borne in spikelets, the spikelets up to 2 1/2 inches long; scales smooth or hairy, sometimes awn-tipped.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; styles 2-3.

Grains: Elongated, with tiny grooves.

Notes: Most plants do not flower every year. Young parts of the plant can be eaten. The stems are used for fishing poles, and can be made into baskets and mats.

Bluejoint

Calamagrostis canadensis (Michx.) Beauv.

Family: Grass (Poaceae)

May-August

Field Marks: This distinctive grass differs from all other grasses that have 1-flowered spikelets by its narrow bluish leaves not more than 1/3 inch broad and its delicate, open panicle.





Local Notes:



Habitat: Wet meadows, wet prairies.

Habit: Perennial grass with rhizomes.

Stems: Erect, unbranched, smooth, up to 5 feet tall.

Leaves: Elongated, very narrow, bluish, up to 1/3 inch broad, not hairy but rough to the touch.

Flowers: Borne singly in spikelets, with many spikelets on slender stalks, forming an open panicle; each spikelet up to 1/6 inch long; glumes narrow, pointed; lemma with a delicate awn not exerted beyond the entire spikelet.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; stigmas 3-cleft.

Grains: Ellipsoid, yellow-brown, smooth, about 1/16 inch long.

Broadleaf Uniola

Chasmanthium latifolium (Michx.) H. Yates

Family: Grass (Poaceae)

June-October

Field Marks: The large, flat spikelets bearing 6-20 flowers and the leaves at least 1/3 inch broad characterize this plant.





Local Notes:

Habitat: Along streams, in moist woods.

Habit: Perennial grass with short rhizomes.

Stems: Upright, unbranched, smooth, up to 4 feet tall.

Leaves: Elongated, up to 1 inch broad, usually ciliate at the base, somewhat roughened along the edges.

Flowers: Borne in flat spikelets, with several spikelets pendulous in a raceme; each spikelet with 3 or more flowers and up to 1 1/4 inches long.

Sepals: 0.

Petals: 0.

Stamens: 1.

Pistils: Ovary superior.

Grains: Dark red, ellipsoid, up to 1/4 inch long.

Stout Woodreed

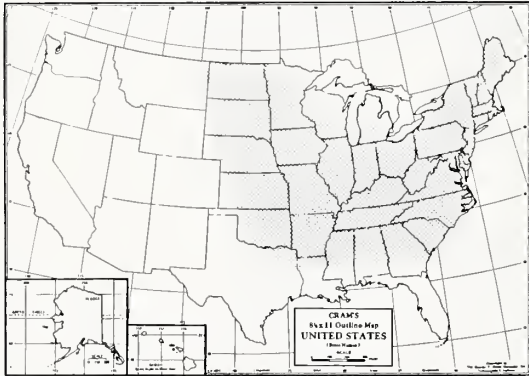
Cinna arundinacea L.

Family: Grass (Poaceae)

July-September

Field Marks: This is the only perennial grass that may grow 5 feet tall and have foot long gray-green panicles composed of 1-flowered spikelets up to 1/6-1/4 inch long with a 3-nerved, short-awned lemma.





Local Notes:



Habitat: Moist woods, meadows, damp thickets, along streams, particularly abundant in shaded habitats.

Habit: Herbaceous perennial with short rhizomes.

Stems: 1-several, erect, smooth, up to 5 feet tall.

Leaves: Alternate, very long and narrow, up to 2/3 inch broad, slightly rough to the touch; sheaths smooth; ligules up to 1/3 inch long.

Flowers: 1 per spikelet, with many spikelets on ascending branches in a gray-green panicle up to 1 foot long; spikelets 1/6-1/4 inch long; glumes lanceolate, pointed; lemma 3-nerved, with a very short awn.

Grains: Yellow, ellipsoid.

Note: The tiny grains formed by this grass are eaten by waterfowl.

Woolly Panicum

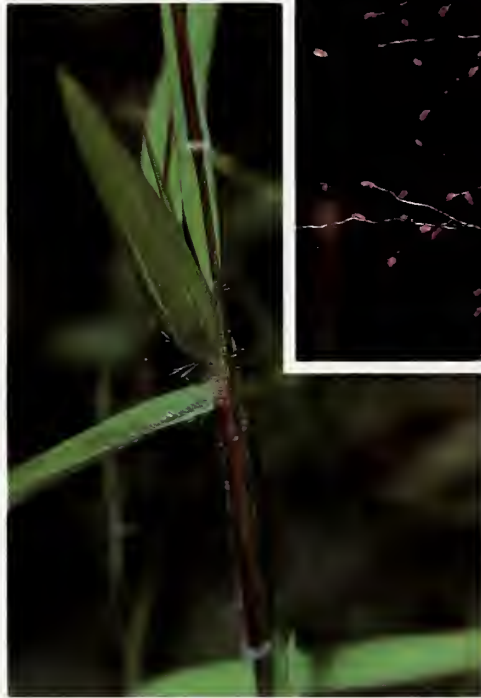
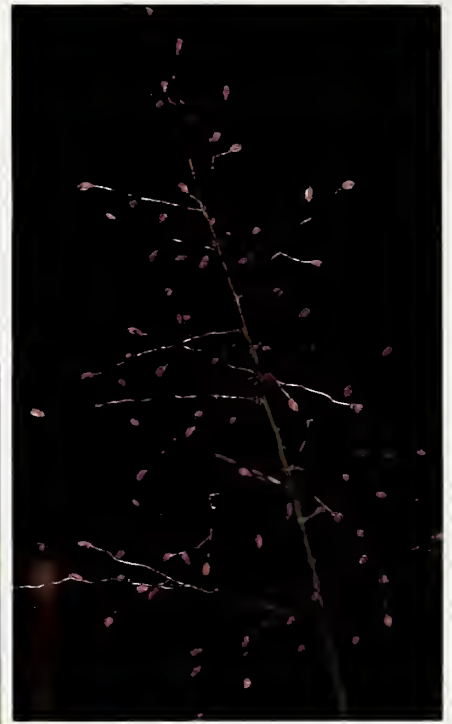
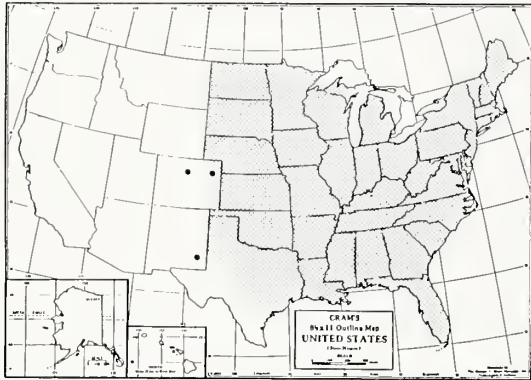
Dichanthelium acuminatum (Swartz) Gould & C. A. Clark

Family: Grass (Poaceae)

May-September

Field Marks: This species is distinguished by its hairy spikelets less than 1/8 inch long and the ligules which are tufts of white hairs.





Local Notes:

Habitat: Along streams, wet meadows, wet prairies.

Habit: Perennial grass with short rhizomes.

Stems: Erect, usually branched, usually hairy, up to 2 feet tall.

Leaves: Elongated, narrow, up to 1/3 inch broad, densely hairy to nearly smooth; ligule a tuft of white hairs.

Flowers: Borne in 1-flowered spikelets, with many spikelets in a panicle, each spikelet obovoid, usually hairy, about 1/12 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Ellipsoid, about 1/20 inch long.

Notes: This species does not occur in the western United States despite the listing in the National Wetlands Inventory.

Deertongue Dichanthelium

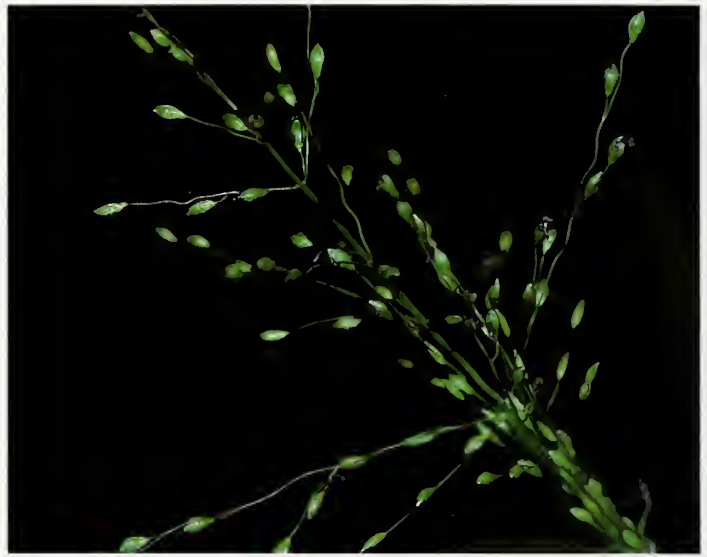
Dichanthelium clandestinum (L.) Gould

Family: Grass (Poaceae)

May-July

Field Marks: This species is distinguished from all species of *Panicum* and *Dichanthelium* by its broad leaves at least 3/4 inch broad and its hairy spikelets at least 1/8 inch long. The sheaths of the leaf are covered with short, stiff hairs.





Local Notes:

Habitat: Along streams, wet prairies; also in drier habitats.

Habit: Perennial grass with thickened rootstocks.

Stems: Erect, branched or unbranched, usually smooth, up to 4 feet tall.

Leaves: Alternate, simple, broadly lanceolate, acute at the tip, heart-shaped at the base, smooth on both surfaces but rough along the edges, up to 8 inches long, up to 1 1/4 inches broad, with sheaths covered with short, stiff hairs.

Flowers: Borne singly in spikelets, with many spikelets in a panicle; each spikelet ellipsoid, at least 1/8 inch long, hairy.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Smooth, about 1/10 inch long.

Notes: This grass is sometimes known as *Panicum clandestinum*.

Barnyard Grass

Echinochloa crusgalli (L.) Beauv.

Family: Grass (Poaceae)

June-November

Field Marks: This grass differs from the very similar wild millet by its soft-tipped lemmas.





Local Notes:



Habitat: Wet ground, usually in disturbed areas.

Habit: Perennial herb with tufts of fibrous roots.

Stems: Erect, smooth, branched or unbranched, up to 6 feet tall.

Leaves: Long and narrow, up to 1 1/2 inches broad, usually slightly rough to the touch; sheaths smooth or with broad-based hairs.

Flowers: 1 per spikelet, with many spikelets grouped to form spikes, the spikes in turn forming a panicle up to 1 foot long; spikelets ovoid, 1/6-1/4 inch long; lemmas with a soft tip, with or without a terminal awn.

Grains: About 1/10 inch long.

Notes: The grains are eaten by waterfowl.

Wild Millet

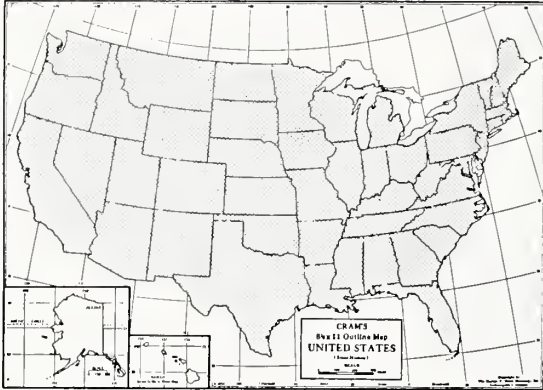
Echinochloa muricata (Beauv.) Fernald

Family: Grass (Poaceae)

July-October

FieldMarks: This grass is recognized by its usually awned, 1-flowered spikelets. It differs from the very similar barnyard grass by the firm tip on its lemmas.





Local Notes:



Habitat: Fallow fields, in sloughs, along rivers and streams, around lakes and ponds.

Habit: Coarse perennial with tufts of fibrous roots.

Stems: Erect, smooth, branched or unbranched, up to 6 feet tall.

Leaves: Alternate, long and narrow, up to 1 1/4 inches broad, sometimes slightly rough to the touch; sheaths smooth or with broad-based hairs.

Flowers: 1 per spikelet, with many spikelets grouped to form spikes, the spikes in turn forming a panicle up to 1 foot long; spikelets ovoid, 1/6-1/4 inch long; lemmas with a firm tip, some of the lemmas usually with a terminal awn.

Grains: About 1/10 inch long.

Notes: The grains are eaten by waterfowl.

Canada Wildrye
Elymus canadensis L.

Family: Grass (Poaceae)

July-October

Field Marks: The Canada wild rye differs from other wild ryes by its arching spikes and its long awns which tend to twist at maturity.





Local Notes:



Habitat: Alluvial woods; banks of rivers; sandy beaches; also in many dry habitats.

Habit: Perennial tufted herb with short rhizomes.

Stems: Erect, unbranched, smooth, up to 5 feet tall.

Leaves: Long, narrow, smooth or rough on both surfaces, pointed and mostly inrolled at the tip, up to 2/3 inch broad.

Flowers: 2-4 per spikelet, the spikelets several in dense, arching spikes, each spike up to 6 inches long; glumes slightly roughened, very narrow, each with an awn up to 1 1/2 inches long; lemmas roughened, up to 1/2 inch long, each with a curved awn up to 2 inches long.

Grains: Sparsely hairy at the tip.

Notes: This species is sometimes called nodding wild rye. The vegetative parts of this grass are palatable to livestock.

Virginia Wildrye

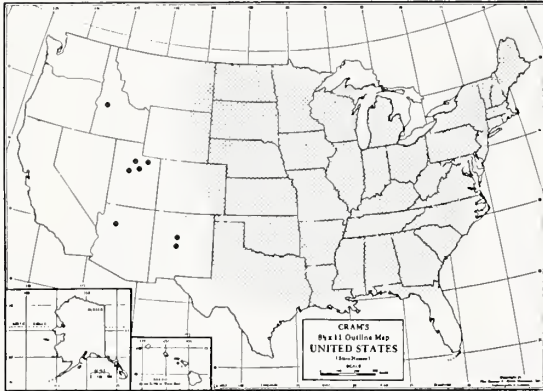
Elymus virginicus L.

Family: Grass (Poaceae)

June-October

Field Marks: Virginia wild rye is distinguished by its relatively stiff, erect spikes, many of which are enclosed at the base by the subtending sheath.





Local Notes:



Habitat: Low woods, along streams, and in many dry habitats.

Habit: Perennial tufted herb with short rhizomes.

Stems: Erect, unbranched, smooth, up to 3 feet tall.

Leaves: Long, narrow, smooth or hairy on the upper surface, rough on the lower surface, up to 1/2 inch wide.

Flowers: 2-6 per spikelet, the spikelets several in dense, stiff, erect spikes, the spikes up to 5 inches long, the lower part of the spike often enclosed by the sheath; glumes smooth or hairy, up to 1 1/2 inches long; lemmas smooth or hairy, up to 1/2 inch long, each with a straight awn up to 1 1/2 inches long.

Grains: Sparsely hairy at the tip.

Notes: This species is palatable to livestock.

Teal Lovegrass

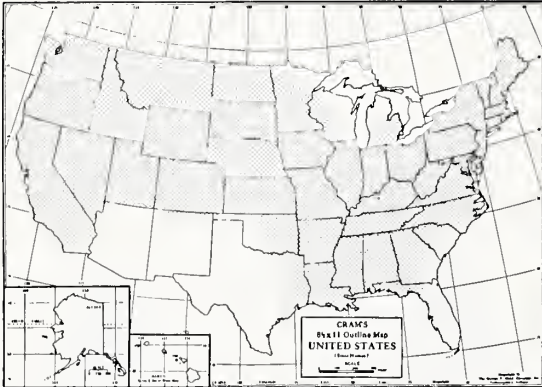
Eragrostis hypnoides (Lam.) BSP.

Family: Grass (Poaceae)

July-November

Field Marks: The genus *Eragrostis* is recognized by its several-flowered spikelets without awns. Teal lovegrass is distinguished from the others by its growth habit where it forms a dense mat on the wet soil. Its stems and leaves are not hairy.





Local Notes:



Habitat: Borders of streams and rivers, edge of ponds and lakes; in sloughs.

Habit: Creeping annual forming dense mats on the wet soil.

Stems: Slender, creeping, branched, smooth, up to 1 foot long.

Leaves: Leaves short and narrow, up to 1 1/2 inches long, 1/20-1/10 inch broad, smooth, rough along the edges.

Flowers: 6-40 per spikelet, with several spikelets arranged in small open panicles, the panicles up to 3 inches long, each spikelet flattened, up to 2/3 inch long, about 1/10 inch wide; glumes pointed, 1/20 inch long; lemmas pointed, hairy, 1/10 inch long.

Grains: Flat, reddish, about 1/40 inch long.

Notes: This species is sometimes known as pony grass.

Tall Fescue

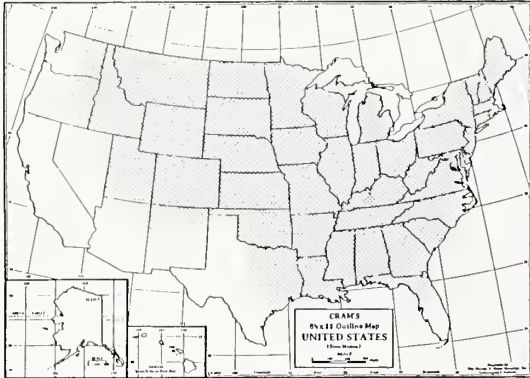
Festuca arundinacea Schreb.

Family: Grass (Poaceae)

April-July

Field Marks: Fescues are distinguished from other grasses by their many-flowered spikelets and their usually awnless lemmas minutely 2-toothed at the tip. Tall fescue has 3-5 flowers per spikelet.





Local Notes:



Habitat: Roadsides, fields, disturbed areas.

Habit: Perennial grass in tufts, with fibrous roots.

Stems: Erect, unbranched, smooth, up to 5 feet tall.

Leaves: Elongated, narrow, slightly rough to the touch, up to 1/2 inch broad.

Flowers: 3-5 in a spikelet; each spikelet up to 2/3 inch long, borne in panicles.

Sepals: 0.

Petals: 0.

Lemmas: Pointed and minutely 2-toothed at the tip, usually smooth, up to 1/3 inch long, usually without an awn.

Stamens: Usually 3.

Pistils: Ovary superior.

Grains: Oblong, reddish, about 1/8 inch long.

Notes: This is an abundant grass often planted for forage and for soil stabilization.

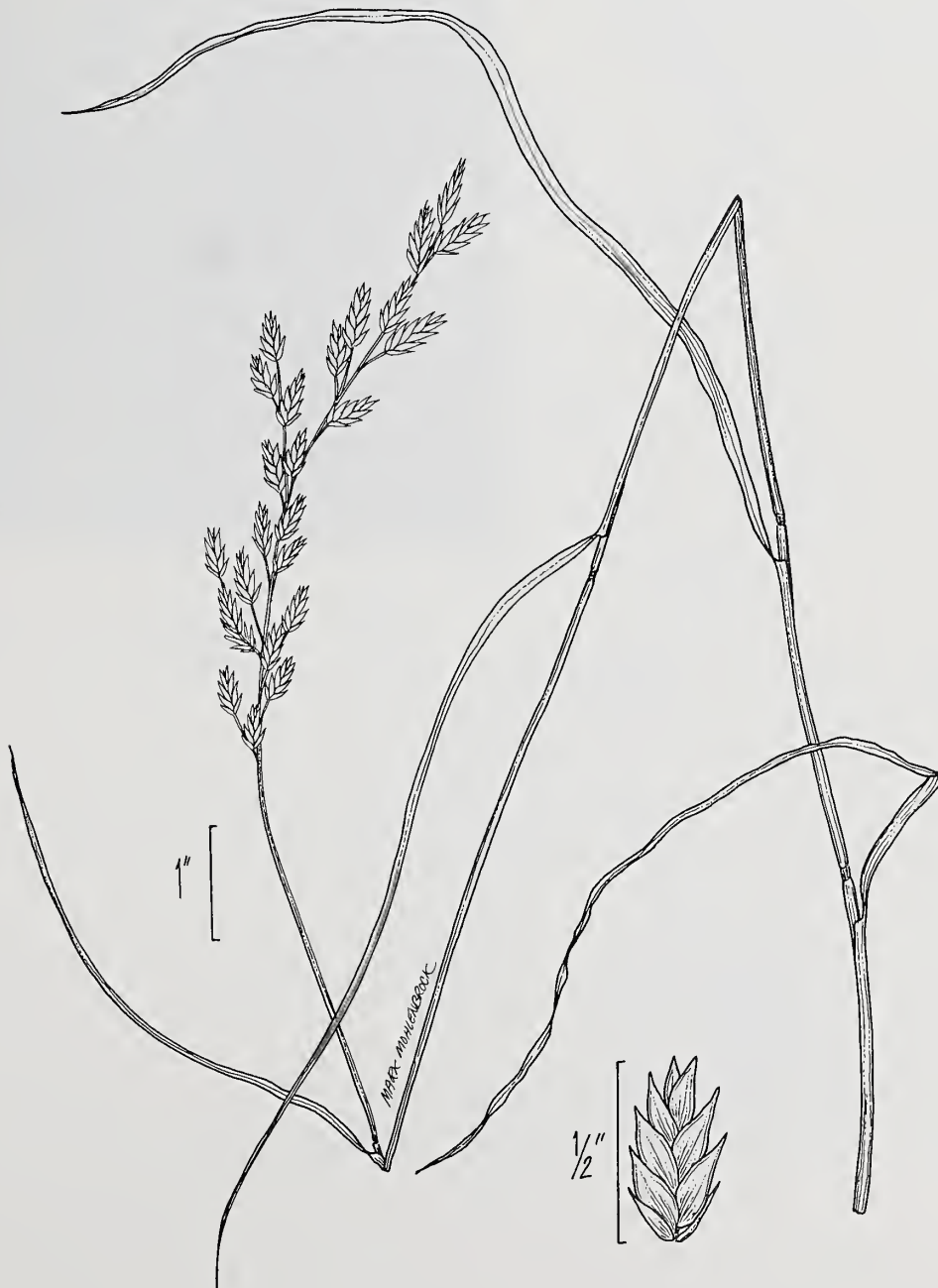
Meadow Fescue

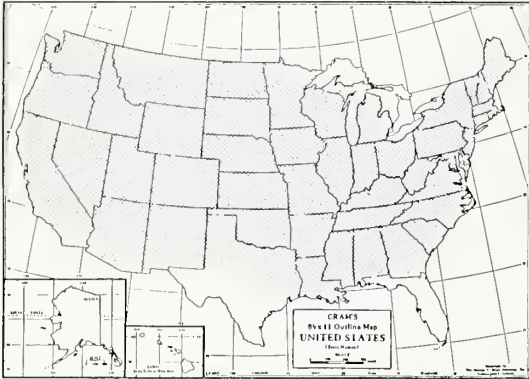
Festuca pratensis Huds.

Family: Grass (Poaceae)

April-July

Field Marks: Meadow fescue is very similar to tall fescue, but differs by having 6 or more flowers per spikelet.





Local Notes:



Habitat: Roadsides, fields, disturbed areas.

Habit: Perennial grass in tufts, with fibrous roots.

Stems: Erect, unbranched, smooth, up to 5 feet tall.

Leaves: Elongated, narrow, slightly rough to the touch, up to 1/2 inch broad.

Flowers: 6 or more in a spikelet; each spikelet up to 1 inch long, borne in panicles.

Sepals: 0.

Petals: 0.

Lemmas: Pointed at the tip, usually smooth, up to 1/2 inch long, usually without an awn.

Stamens: Usually 3.

Pistils: Ovary superior.

Grains: Oblong, reddish, about 1/8 inch long.

Notes: This grass is a good grass for forage and for stabilizing the soil.

Fowl Mannagrass
Glyceria striata (Lam.) A. Hitchc.

Family: Grass (Poaceae)

May-August

Field Marks: This grass is distinguished by its many-flowered, awnless spikelets less than 1/4 inch long.





Local Notes:



Habitat: Wet meadows, low woods, bogs, roadside ditches, swamps.

Habit: Tufted perennial herb with fibrous roots or short rhizomes.

Stems: Erect, smooth, up to 4 feet tall.

Leaves: Flat or sometimes folded lengthwise, somewhat rough to the touch, up to 1/3 inch wide.

Flowers: 3-7 per spikelet, with many spikelets in slender panicles up to 1 foot long; spikelets less than 1/4 inch long.

Stamens: 3.

Pistils: Ovary superior.

Grains: Shiny, reddish, 1/20 inch long.

Foxtail Barley
Hordeum jubatum L.

Family: Grass (Poaceae)

May-October

Field Marks: This grass is distinguished by its soft, nodding spikes with awns up to 2 1/2 inches long.





Local Notes:



Habitat: Along roads, disturbed soil.

Habit: Annual herb with fibrous roots.

Stems: Erect, smooth, up to 2 feet tall.

Leaves: Up to 5 inches long, up to 1/4 inch broad, smooth or finely hairy on both surfaces, with usually smooth sheaths.

Flowers: Borne in spikelets, with 3 spikelets in a group; the middle spikelet without a stalk and bearing both stamens and pistils; the outer spikelets with a short stalk and usually sterile; awns up to 2 1/2 inches long.

Stamens: 3.

Pistils: Ovary superior.

Grains: Hairy at the tip.

Notes: This is a good pasture grass before the flowering heads mature.

Little Barley
Hordeum pusillum Nutt.

Family: Grass (Poaceae)

April-June

Field Marks: The distinguishing features of this grass are its short stature and its small, erect spikes with straight awns.





Local Notes:



Habitat: Roadside ditches and many other habitats.

Habit: Annual herb with fibrous roots.

Stems: Usually erect, smooth, up to 6 inches tall.

Leaves: Elongated and narrow, up to 3 inches long, up to 1/10 inch broad, smooth.

Flowers: Borne in spikelets, with 3 spikelets in a group and all the spikelets forming a single, unbranched spike at the tip of the stem, the spike up to 3 inches long; central spikelet in each group of 3 forming pollen and grains, the 2 lateral spikelets sterile; central spikelet up to 1/6 inch long; all spikelets awned.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; styles 2.

Grains: Hairy at the tip, attached to a small scale.

Notes: Although this species is eaten by livestock, the awns on the spikelets may cause injury to the mouths of the animals.

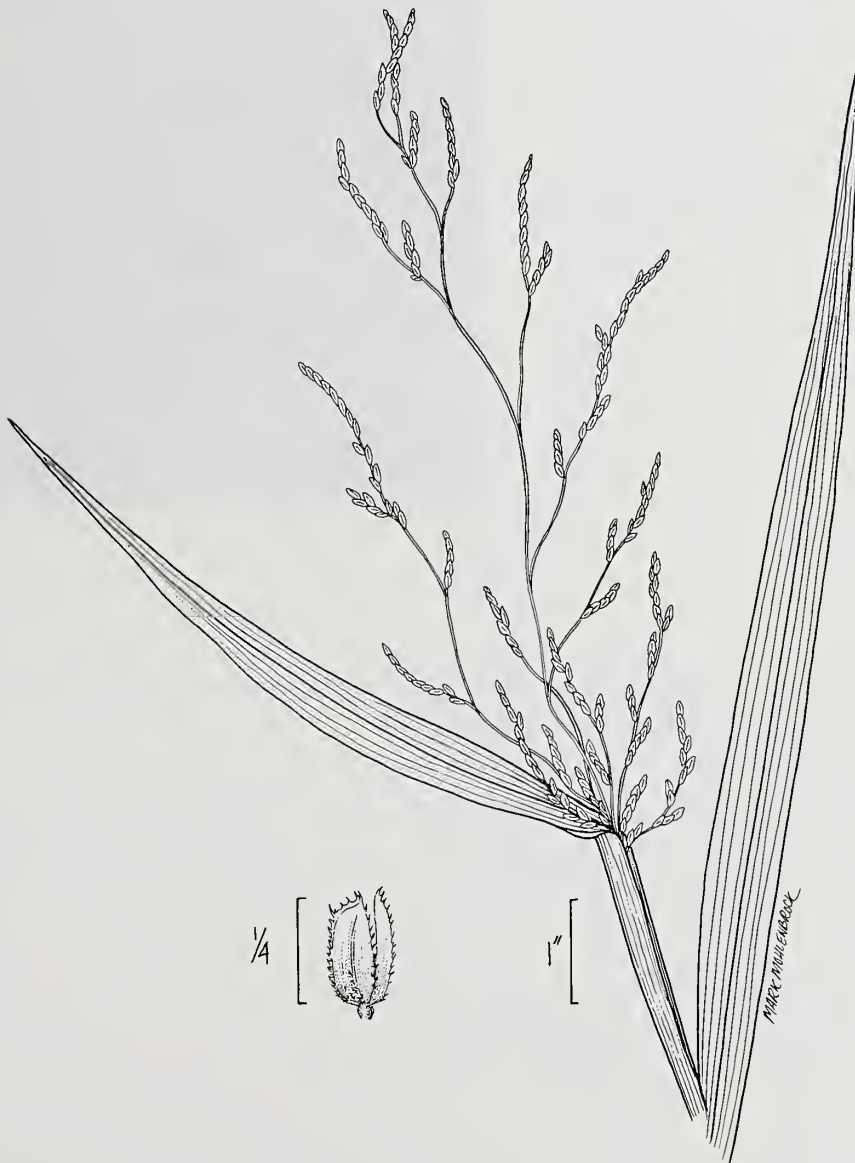
Rice Cutgrass

Leersia oryzoides (L.) Swartz

Family: Grass (Poaceae)

June-October

Field Marks: This species is recognized by its rough, saw-toothed leaf edges and its spikelets 1/6-1/4 inch long.





Local Notes:



Habitat: Swamps, sloughs, around ponds and lakes, wet meadows, roadside ditches.

Habit: Perennial herbs from slender rhizomes.

Stems: Ascending to erect, branched, usually smooth, up to 5 feet tall.

Leaves: Flat, elongated, up to 1/2 inch wide, with small but sharp-cutting teeth along the edges.

Flowers: 1 per spikelet, with many spikelets arranged in a panicle up to 8 inches long; each spikelet greenish-white, oblong, 1/6-1/4 inch long.

Stamens: 3.

Pistils: Ovary superior; styles 3.

Grains: Red-brown, ellipsoid, 1/8 inch long.

Notes: The saw-toothed leaf edges can readily tear the flesh.

Whitegrass

Leersia virginica Willd.

Family: Grass (Poaceae)

June-October

Field Marks: Whitegrass differs from all other species of *Leersia* by its tiny spikelets only about 1/6 inch long and 1/20 inch across.





Local Notes:



Habitat: Moist woods, swamps, sloughs.

Habit: Perennial herbs with very slender rhizomes.

Stems: Spreading or ascending, branched, smooth or slightly hairy, very slender, up to 3 feet long.

Leaves: Slender, smooth or hairy, up to 6 inches long, up to 1/2 inch broad.

Flowers: 1 per spikelet, with several spikelets forming a slender panicle, each spikelet flattened, about 1/6 inch long and 1/20 inch across, rounded at the tip, hairy.

Stamens: 1-2.

Pistils: Ovary superior; styles 3.

Grains: Red-brown, ellipsoid, 1/10 inch long.

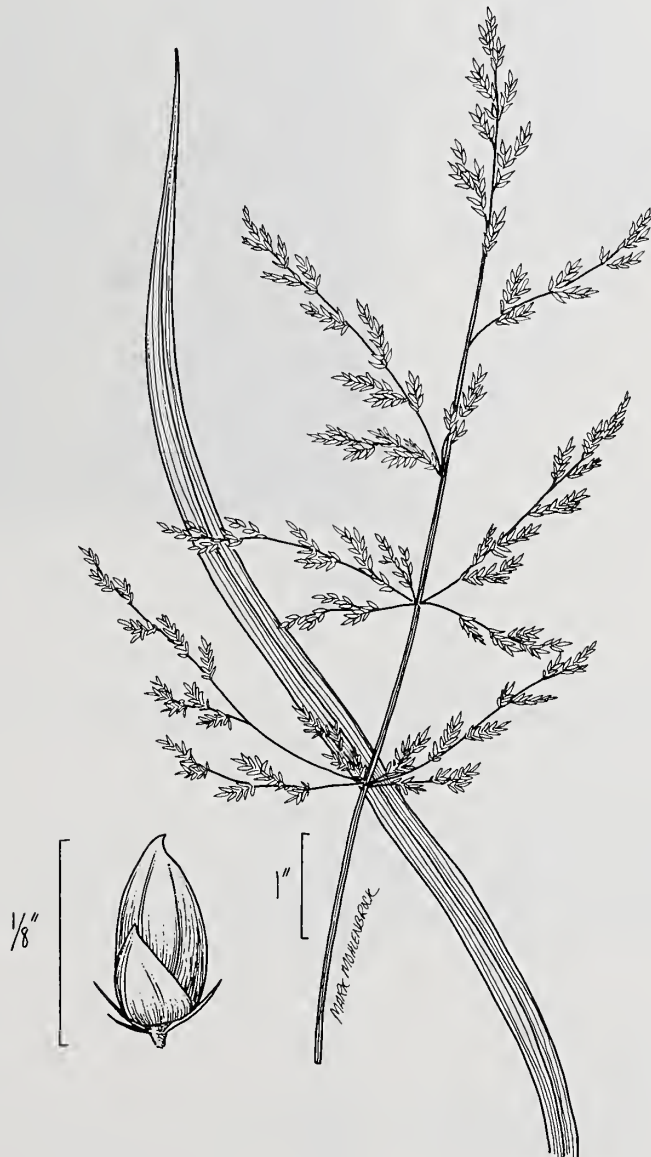
Redtop Panicum

Panicum rigidulum Bosc

Family: Grass (Poaceae)

July-October

Field Marks: This *Panicum* differs by its very tiny straight spikelets, its smooth stems and leaves, and its leaves at least $\frac{1}{4}$ inch broad.





Local Notes:



Habitat: Wet prairies, wet meadows, damp woods, in roadside ditches, along streams, around ponds and lakes.

Habit: Tufted perennial herbs.

Stems: Erect, branched, smooth, up to 3 feet tall.

Leaves: Long and narrow, rough, up to 15 inches long, 1/4-1/2 inch broad.

Flowers: 1 per spikelet, with many spikelets forming a panicle up to 1 1/2 feet long; spikelets 1/12 inch long, pointed at the tip, smooth.

Stamens: 3.

Pistils: Ovary superior; styles 3.

Grains: 1/20 inch long.

Notes: This species used to be known as *P. agrostoides*.

Florida Paspalum
Paspalum floridanum Michx.

Family: Grass (Poaceae)

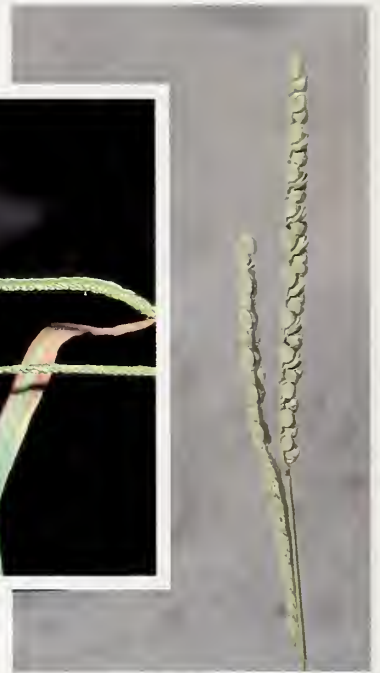
August-October

Field Marks: This is the only beadgrass with paired spikelets at least 1/6 inch long.





Local Notes:



Habitat: Wet meadows, wet prairies, along streams, around ponds and lakes, roadside ditches.

Habit: Perennial grass with thick rhizomes.

Stems: Erect, smooth, up to 4 feet tall.

Leaves: Elongated, narrow, usually smooth, up to 15 inches long, up to 3/4 inch broad.

Flowers: One per spikelet, with several spikelets in 3-6 racemes; the racemes up to 6 inches long; spikelets usually borne in pairs; each spikelet oval to spherical, smooth, up to 1/6 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Dark red, broadly ellipsoid, up to 1/6 inch long.

Notes: The grains are eaten by waterfowl.

Water Paspalum

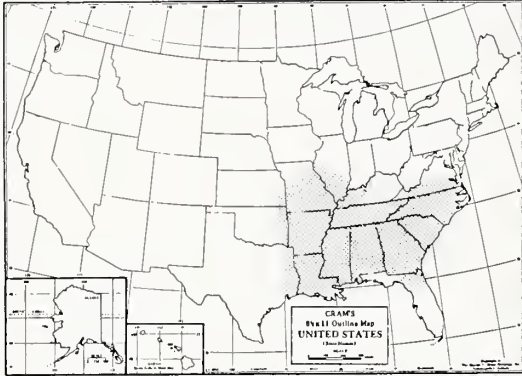
Paspalum fluitans (Elliott) Kunth

Family: Grass (Poaceae)

July-October

Field Marks: This is one of the few species of *Paspalum* that has the rachis to which the spikelets are attached broader and wider than the spikelets themselves. It has at least 5 spikes per plant, and each spikelet is less than 1/12 inch long.





Local Notes:



Habitat: Sloughs, bayous, along streams, around lakes and ponds, sometimes in standing water.

Habit: Floating or creeping perennial herb.

Stems: Floating or creeping, much branched, smooth, up to 3 feet long.

Leaves: Up to 12 inches long, up to 1 inch wide, long-pointed at the tip, rough to the touch, with roughened sheaths.

Flowers: 1 per spikelet, with many spikelets forming a spike; each spikelet hairy, less than 1/12 inch long, elliptic, in 2 rows; all spikelets borne on a rachis that is broader than the spikelets; spikes 5 or more per stem.

Stamens: 3.

Pistils: Ovary superior.

Grains: Ovoid, smooth.

Field Paspalum
Paspalum laeve Michx.

Family: Grass (Poaceae)

July-October

Field Marks: This species differs from other species of *Paspalum* by its smooth spikelets in 1 or 2 rows and less than 1/6 inch in diameter.





Local Notes:



Habitat: Wet prairies, old fields, around ponds and lakes, in roadside ditches.

Habit: Perennial herb with short rhizomes.

Stems: Erect, usually smooth, up to 2 1/2 feet tall.

Leaves: Long, narrow, flat, smooth or sometimes ciliate along the margins, up to 1/2 inch wide.

Flowers: 1 flower per spikelet, with several spikelets in 1-2 rows in elongated, slender racemes; each spikelet smooth, circular in outline, about 1/6 inch broad, smooth.

Stamens: 3.

Pistils: Ovary superior; styles 3.

Grains: Yellow, spherical, 1/10 inch in diameter.

Notes: The grains are eaten by waterfowl.

Reed Canarygrass

Phalaris arundinacea L.

Family: Grass (Poaceae)

April-August

Field Marks: This grass has spikelets with 1 flower and 3 or 4 empty scales, rather than 2 empty scales. The leaves may be 1 inch broad.





Local Notes:



Habitat: Marshes, along streams, wet meadows.

Habit: Perennial herb with scaly, creeping rhizomes.

Stems: Erect, smooth, up to 4 feet tall.

Leaves: Flat, elongated, up to nearly 1 inch broad.

Flowers: Borne in spikelets with many spikelets arranged in a spike-like panicle up to 1 foot long; each spikelet 1-flowered, with 3 or 4 empty scales.

Stamens: 3.

Pistils: Ovary superior.

Grains: Ellipsoid, about 1/10 inch long.

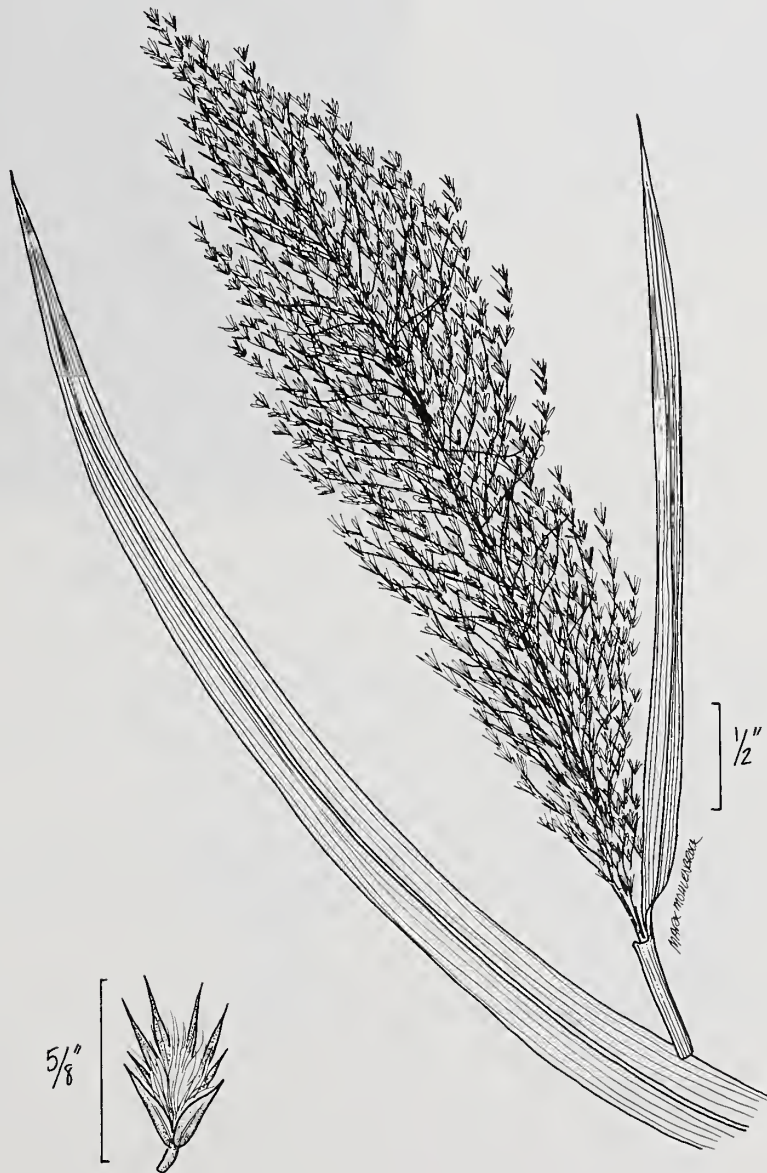
Common Reed

Phragmites australis (Cav.) Trin.

Family: Grass (Poaceae)

July-September

Field Marks: This grass is distinguished by its huge stature, up to 12 feet tall, and its large panicle of spikelets.





Local Notes:



Habitat: Along streams, around ponds, sloughs, reclaimed stripmine areas.

Habit: Robust perennial herb with stout, creeping rhizomes, forming dense colonies.

Stems: Erect, smooth, up to 12 feet tall.

Leaves: Flat, elongated, smooth, up to 2 1/2 inches broad.

Flowers: 3-7 flowers per spikelet, with many spikelets arranged in a large, dense, much-branched panicle up to 1 1/4 feet long; spikelets 3/4 inch long, bearing numerous silky hairs.

Stamens: 3.

Pistils: Ovary superior.

Notes: This species is frequently planted for stripmine reclamation.

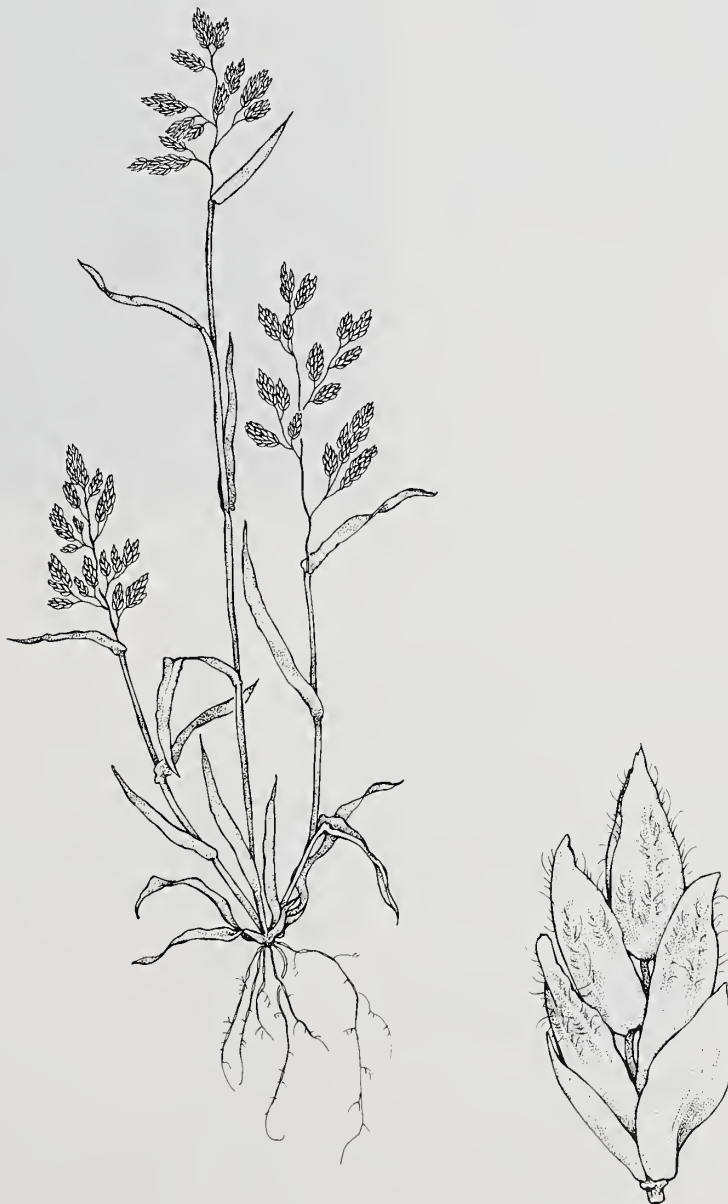
Annual Bluegrass

Poa annua L.

Family: Grass (Poaceae)

March-October

Field Marks: Bluegrasses have 2 or more flowers in a spikelet. Annual bluegrass is the only wetland *Poa* that lacks the tuft of cobwebby hairs at the base of the fertile scales. It is the first bluegrass to bloom in the spring.





Local Notes:



Habitat: Fallow fields and in most disturbed areas.

Habit: Annual herbs with fibrous roots.

Stems: Sprawling or occasionally erect, smooth, usually less than 8 inches long.

Leaves: Up to 3 1/2 inches long, up to 1/10 inch broad, smooth.

Flowers: 4-5 borne in spikelets up to 1/6 inch long, with several spikelets forming small panicles; each flower subtended by a scale that lacks a tuft of cobwebby hairs near its base.

Stamens: 3.

Pistils: Ovary superior.

Grains: Yellow-brown, about 1/20 inch long.

Canada Bluegrass

Poa compressa L.

Family: Grass (Poaceae)

May-August

Field Marks: This perennial bluegrass differs by its slender inflorescence and its stems that are flattened near the base.





Local Notes:



Habitat: Pastures, roadsides, most disturbed habitats.

Habit: Perennial grass with slender rhizomes.

Stems: Erect or spreading from the base, smooth, blue-green, flat near the base, up to 2 feet tall.

Leaves: Elongated, narrow, rough on the upper surface, up to 1/6 inch broad.

Flowers: Arranged in spikelets; the spikelets in slender panicles; each spikelet up to 1/6 inch long, with 4-5 flowers.

Lemmas: Pointed at the tip, usually 3-nerved, sparsely hairy.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Lanceoloid, yellowish, up to 1/12 inch long.

Kentucky Bluegrass

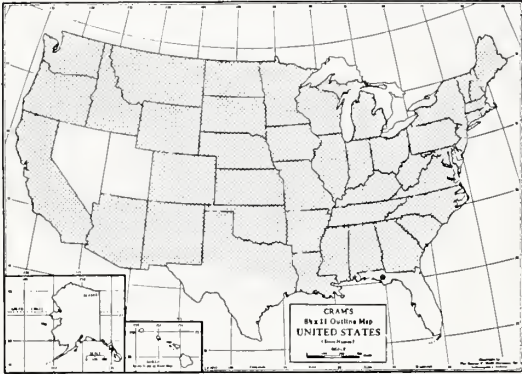
Poa pratensis L.

Family: Grass (Poaceae)

April-July

Field Marks: Kentucky bluegrass has creeping rhizomes and pointed scales that subtend each flower.





Local Notes:



Habitat: Along rivers, damp meadows, pastures, and many other habitats.

Habit: Perennial herb with extensive rhizomes.

Stems: Erect, unbranched, smooth, up to 3 feet tall.

Leaves: Leaves long and narrow, up to 6 inches long, up to 1/4 inch broad, smooth or somewhat rough to the touch.

Flowers: Borne in spikelets, with 3-5 flowers per spikelet; each spikelet up to 1/4 inch long, on short, slender stalks; scales pointed at the tip, sometimes silky-hairy on the veins and with a tuft of cobwebby hairs at the base, up to 1/8 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; styles usually 2.

Grains: Elongated, smooth.

Notes: The pollen of this species may cause hay fever.

Faber Bristlegrass
Setaria faberi Herrm.

Family: Grass (Poaceae)

July-October

Field Marks: This species is recognized by its arching, soft-bristly spikes at least 3 inches long.





Local Notes:



Habitat: Fields and generally any disturbed habitat.

Habit: Coarse annual herb with fibrous roots.

Stems: Erect, smooth or slightly hairy at the nodes, up to 4 feet tall.

Leaves: Up to 8 inches long, up to 1 inch broad, hairy on the upper surface, with ciliate sheaths.

Flowers: 1 per spikelet, with many spikelets crowded into an arching spike up to 5 inches long; each spikelet subtended by 1-3 soft bristles up to 1 inch long.

Stamens: 3.

Pistils: Ovary superior.

Grains: Usually enclosed by scales.

Notes: The usual common names for this species are giant foxtail or nodding foxtail.

Yellow Foxtail

Setaria glauca (L.) Beauv.

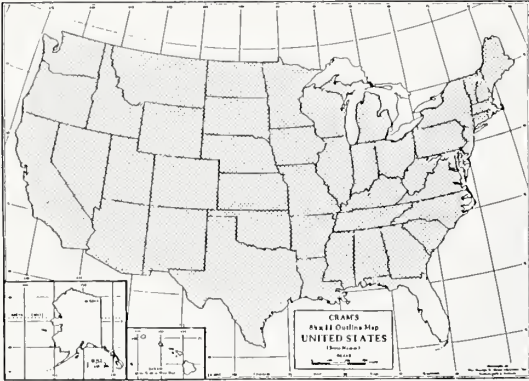
Setaria glauca (L.) Beauv.

Family: Grass (Poaceae)

June-October

Field Marks: This annual foxtail has stiff, erect spikes subtended by bristles that are usually yellowish.





Local Notes:



Habitat: Along streams, along roads, fields, pastures, and most disturbed areas.

Habit: Annual herb with fibrous roots.

Stems: Usually erect, smooth, up to 3 feet tall.

Leaves: Up to 7 inches long, up to 1/3 inch broad, smooth, with smooth sheaths.

Flowers: 1 per spikelet, with many spikelets crowded into a straight, erect spike up to 4 inches long; each spikelet subtended by 4-8 straight, stiff, usually yellow bristles up to 1/2 inch long.

Stamens: 3.

Pistils: Ovary superior.

Grains: Usually enclosed by scales.

Notes: This plant is commonly called pigeon grass in some areas.

Prairie Cordgrass
Spartina pectinata Link

Family: Grass (Poaceae)

June-September

Field Marks: This rhizome-bearing grass has flat, 1-flowered spikelets crowded into 2 rows on one side of the branchlets.





Local Notes:



Habitat: Wet prairies, wet meadows, in sloughs, around ponds, swamps.

Habit: Coarse perennial herb with rhizomes.

Stems: Erect, usually unbranched, smooth, up to 6 feet tall.

Leaves: Long, narrow, rough along the edges, up to 1 foot long, up to 2/3 inch broad.

Flowers: 1 per spikelet, with many flat spikelets crowded into 2 rows on one side of the branchlets of the spike; each spike up to 5 inches long.

Sepals: 0.

Petals: 0.

Scales: Hairy, tapering to a slender point.

Stamens: 3.

Pistils: Ovary superior.

Grains: Small, smooth.

Notes: The pollen of this grass may cause hay fever.

Prairie Wedgegrass

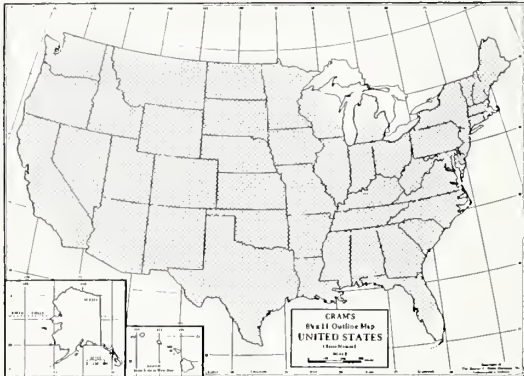
Sphenopholis obtusata (Michx.) Scribn.

Family: Grass (Poaceae)

May-July

Field Marks: The genus *Sphenopholis* usually has 2-flowered spikelets. *Sphenopholis obtusata* differs from other members of the genus by its very slender inflorescence and round-tipped scales of the spikelet.





Local Notes:



Habitat: Moist woods; also in drier habitats.

Habit: Perennial grass with slender rhizomes.

Stems: Erect, smooth or hairy, up to 2 feet tall.

Leaves: Elongated, narrow, rough to the touch or merely hairy, up to 1/4 inch wide.

Flowers: Borne in spikelets; the spikelets 2-flowered, up to 1/8 inch long, arranged in a very narrow panicle up to 6 inches long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Grains: Narrowly ellipsoid, yellowish, shiny, about 1/10 inch long.

GROUP 3

Sedges

Slough Sedge

Carex atherodes Spreng.

Family: Sedge (Cyperaceae)

May-July

Field Marks: The distinguishing features of this species are the separate male and female spikes, the sharply 2-toothed beak of the perigynium, and the hairy leaves.





Local Notes:



Habitat: Swamps, wet meadows.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth or sometimes rough to the touch, sharply triangular, up to 5 feet tall.

Leaves: Elongated, rough to the touch, usually hairy at least on the lower surface, up to 1/2 inch broad.

Flowers: Male and female flowers borne in separate spikes; the male spikes 2-6 in number, usually on long stalks; the female spikes 3-5, cylindrical, on very short stalks or on no stalks at all, up to 4 inches long.

Scales: Broadly lanceolate, awn-tipped, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium broadly lanceoloid, smooth, many-nerved, gradually tapering to a slender, 2-toothed beak, up to 1/6 inch long.

Fruits: Achenes triangular, smooth.

Notes: The achenes are eaten by waterfowl. Flora of the Pacific Northwest by Hitchcock and Cronquist (1973) does not attribute this species to California, although the national Wetlands Inventory lists it for area 10.

Woodland Sedge

Carex blanda Dewey

Family: Sedge (Cyperaceae)

April-July

Field Marks: The male flowers are borne in separate spikes from the female. The short beak of the perigynium, which is not 2-cleft, is bent to one side.





Local Notes:



Habitat: Wet woods, along rivers and streams.

Habit: Perennial herb with slightly thickened rootstocks.

Stems: Erect, smooth, pale green, up to 15 inches tall, not purplish at the base.

Leaves: Elongated, narrow, usually shorter than the flowering stem, pale green, smooth, up to 1/2 inch broad.

Flowers: Male and female flowers borne in separate spikelets; the male flowers in separate narrow spikes up to 1 inch long and borne on a very short stalk; the female flowers crowded in 2-4 spikes, the upper ones sessile, the lower 1-2 on slender stalks.

Sepals: 0.

Petals: 0.

Scales: Ovate, white along the edges, green down the middle, pointed at the tip or even awned, shorter than the perigynia.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium obovoid, tapering to a short, bent, toothless tip, smooth, veiny, up to 1/8 inch long.

Fruits: Achenes triangular, smooth.

Notes: The achenes are sometimes eaten by waterfowl. The leaves may be grazed by deer.

Bush Sedge

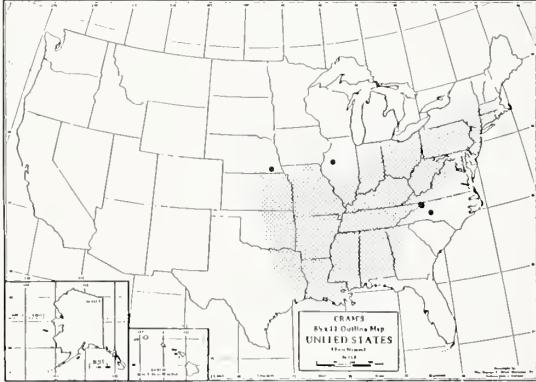
Carex bushii Mackenz.

Family: Sedge (Cyperaceae)

April-July

Field Marks: The male flowers are located below the short, thickened female spike. This species differs from similar species by its hairy leaves and hairy perigynia.





Local Notes:



Habitat: Wet prairies, wet meadows, along rivers and streams, around ponds and lakes, moist woods, as well as several drier habitats.

Habit: Perennial herb with slender rootstocks.

Stems: Erect, slender, usually hairy, rough to the touch, up to 2 feet tall.

Leaves: Elongated, narrow, usually hairy, up to 1/8 inch broad.

Flowers: Male and female flowers in the same spike, the male flowers below the female flowers; spikes usually 2-3 per stem, oblongoid to oblong-cylindric, up to 3/4 inch long, up to 1/3 inch broad, erect.

Sepals: 0.

Petals: 0.

Scales: Lanceolate, pointed or with a short, toothed awn, longer than the perigynia.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium obovoid, up to 1/8 inch long, ribbed, hairy, rounded or pointed at the tip but not beaked.

Fruits: Achenes obovoid, smooth.

Notes: The achenes are eaten by waterfowl.

Longhair Sedge

Carex comosa Boott

Family: Sedge (Cyperaceae)

July-August

Field Marks: This *Carex* is recognized by the male and female flowers in separate spikes, the perigynia less than 1/2 inch long and with a prominent beak with 2 teeth, and the lowermost perigynia in a spike pointing downward.





Local Notes:



Habitat: Swamps, around lakes.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, smooth, up to 5 feet tall.

Leaves: Long, narrow, rough along the edges, up to 1/3 inch broad.

Flowers: Many in spikelets, each flower subtended by a scale; the male flowers in separate spikes from the female flowers, only 1 male spike per stem, long and slender; the female spikes usually 2-6 per stem, up to 3 inches long, up to 1/3 inch across, on slender stalks that droop at maturity.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: 1 per scale, the scales with a slender, toothed awn, each perigynium lanceoloid, smooth, up to 1/4 inch long, with a slender beak with 2 teeth at the tip, the lowermost perigynia usually pointing downward; stigmas 3.

Fruits: Achenes triangular.

Notes: The fruits are eaten by waterfowl.

Fringed Sedge

Carex crinita Lam.

Family: Sedge (Cyperaceae)

May-July

Field Marks: This distinctive sedge has long, drooping, narrow spikes with slender, projecting scales subtending each perigynium.





Local Notes:



Habitat: Wet meadows, wet prairies, swamps, sloughs.

Habit: Perennial herb with thickened rootstocks, growing in dense clumps.

Stems: Erect, triangular, rough to the touch or smooth, up to 4 feet tall.

Leaves: Elongated, narrow, rough to the touch along the margins, up to 1/2 inch broad.

Flowers: Male and female flowers borne separately; the male usually in slender, erect spikes up to 2 1/2 inches long; the female in drooping spikes up to 4 inches long, with projecting scales subtending each perigynium.

Scales: Narrow, tapering to a slender, toothed awn 2 or more times longer than the perigynium.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium ellipsoid to ovoid to nearly spherical, up to 1/6 inch long, with a minute, toothless beak.

Fruits: Achenes obovoid, granular, up to 1/8 inch long.

Notes: The seeds are eaten by waterfowl.

Crested Sedge
Carex cristatella Britton

Family: Sedge (Cyperaceae)

May-July

Field Marks: This species has spikelets more or less spherical, and perigynia broadly lanceolate.





Local Notes:



Habitat: Wet prairies, wet meadows, swamps, along streams, around ponds, roadside ditches.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, rough to the touch, up to 3 feet tall.

Leaves: Elongated, narrow, shorter than the stems, smooth, up to 1/4 inch broad.

Flowers: Male and female borne separately; the male few at the base of the female spikelets; the spikelets crowded, spherical or nearly so, up to 1/3 inch in diameter.

Scales: Lanceolate, pointed or rounded at the tip, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium flat, wing-margined, broadly lanceolate, minutely toothed near the tip, up to 1/16 inch broad.

Fruits: Achenes triangular, smooth.

Notes: The achenes are eaten by waterfowl. Aquatic and Wetland Plants of Southwestern United States by Correll and Correll (1975) does not attribute this species to Oklahoma or Texas.

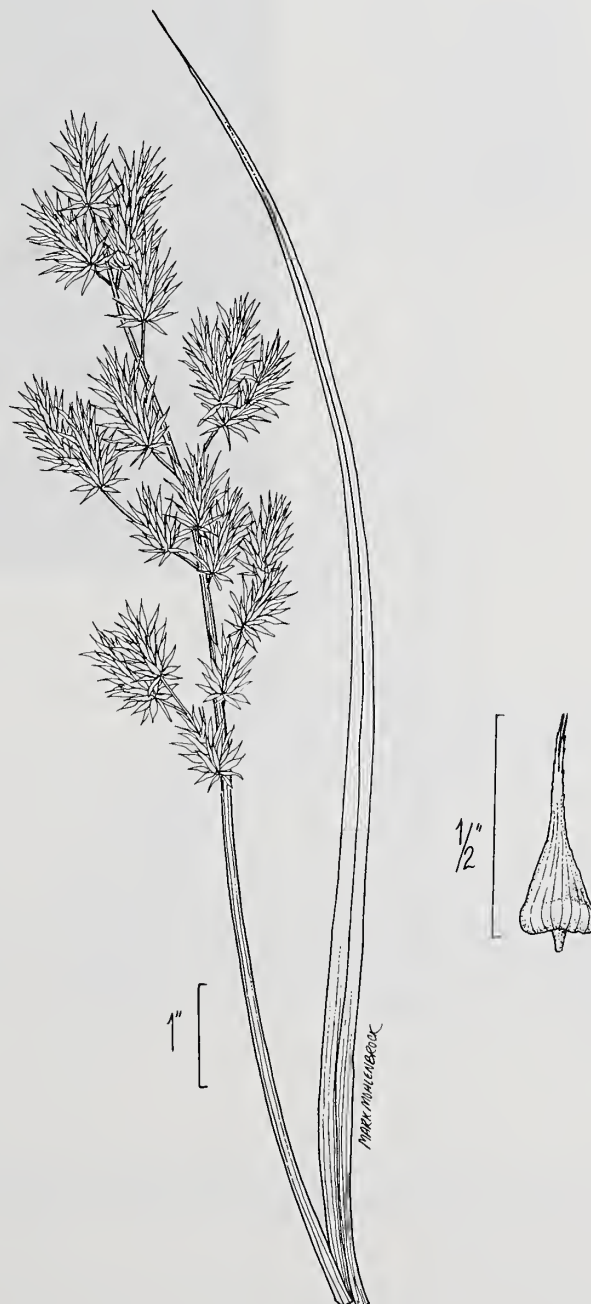
Crowfoot Sedge

Carex crus-corvi Shuttlew.

Family: Sedge (Cyperaceae)

May-July

Field Marks: This well-marked sedge is distinguished by its large spikes and the large perigynium with the beak at least twice as long as the rest of the perigynium.





Local Notes:



Habitat: Swamps, floodplain woods, wet meadows, wet prairies.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, several in a clump, strongly triangular, rough to the touch, bluish to dark green, up to 2 1/2 feet tall.

Leaves: Elongated, narrow, bluish to dark green, rough along the edges to the touch, up to 1/2 inch broad.

Flowers: Male and female flowers borne separately but in the same spike; the male flowers above the female flowers; the spikes up to 10 inches long, up to 2 inches broad.

Scales: Ovate to lanceolate, pointed at the tip, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium lanceoloid, spongy at the base, tapering to a long, minutely toothed beak at least twice as long as the rest of the perigynium, the entire perigynium up to 1/2 inch long.

Fruits: Achenes brownish, more or less triangular, up to 1/10 inch long.

Notes: The color of the leaves varies from bluish to dark green. The achenes are eaten by waterfowl.

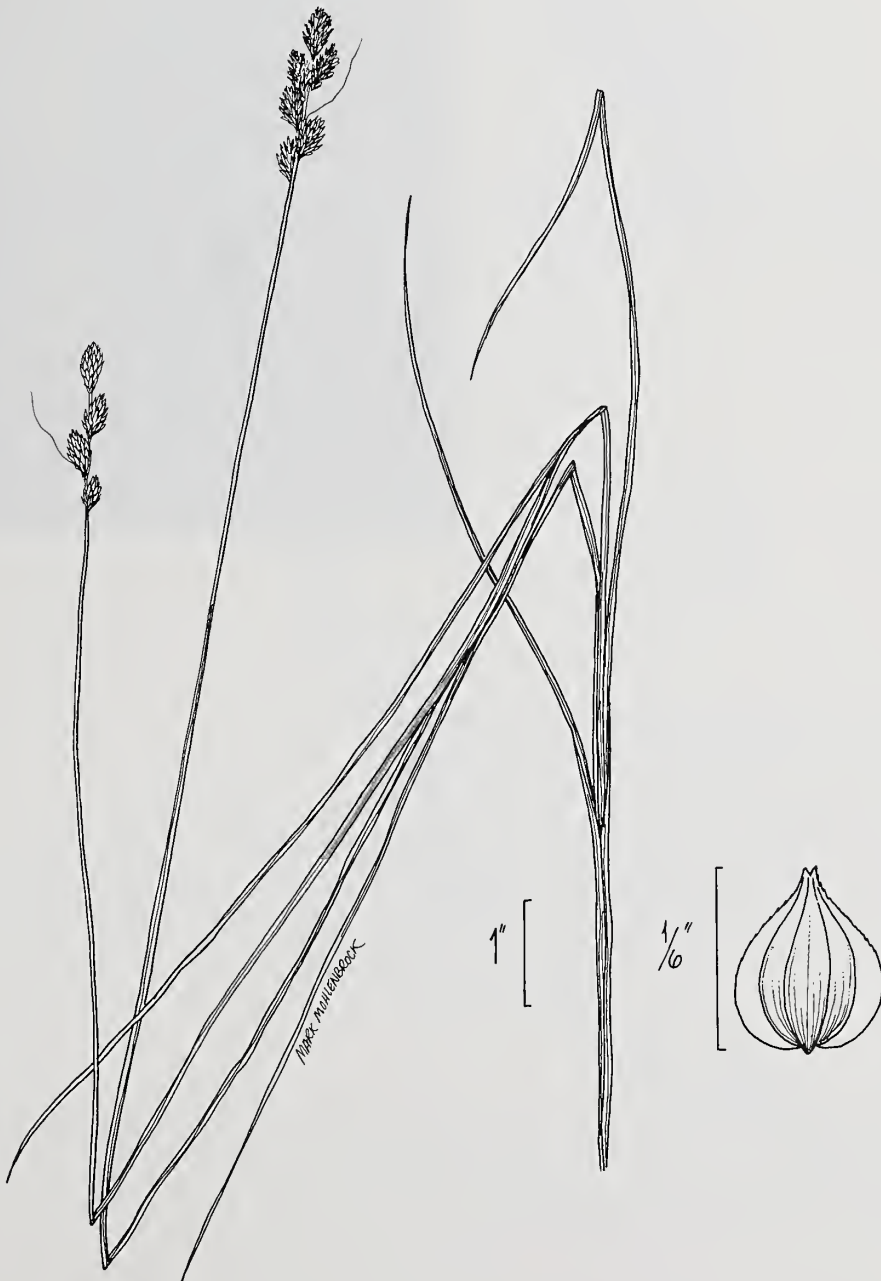
Fescue Sedge

Carex festucacea Schkuhr

Family: Sedge (Cyperaceae)

May-July

Field Marks: The spikes of this species overlap only slightly or not at all. The perigynia are broadly ovate or nearly round.





Local Notes:



Habitat: Wet woods, wet prairies, around lakes and ponds.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth or sometimes rough to the touch, up to 3 feet tall.

Leaves: Elongated, narrow, shorter than the stem, smooth, up to 1/6 inch broad.

Flowers: Male and female flowers borne separately; the male crowded at the base of the female spikelets; the female spikelets barely overlapping or separate, up to 1/2 inch long.

Scales: Lanceolate to broadly lanceolate, rounded or pointed at the tip, up to 1/8 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium flat, ovate to nearly round, up to 1/6 inch long with a small beak.

Fruits: Achenes smooth, 1/16 inch long.

Thin-fruited Sedge

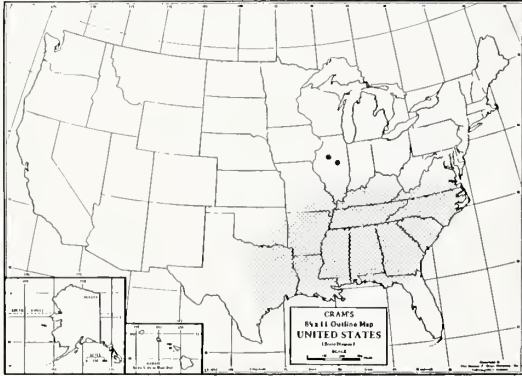
Carex flaccosperma Dewey

Family: Sedge (Cyperaceae)

May-June

Field Marks: This species differs from the other sedges with bluish or pale green leaves by its beakless perigynia at least 1/6 inch long.





Local Notes:



Habitat: Wet woods, swamps.

Habit: Perennial herb with thickened rootstocks.

Stems: Sprawling or erect, smooth, bluish or pale green, up to 1 foot long.

Leaves: Elongated, narrow, smooth, bluish or pale green, up to 1/2 inch broad.

Flowers: Male and female flowers borne separately; the male in a separate erect spike up to 1 inch long, the female crowded into short, cylindrical spikes, up to 1 inch long.

Scales: Narrow, short-awned, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium ellipsoid, without a beak, up to 1/4 inch long.

Fruits: Achenes ellipsoid, about 1/12 inch long.

Notes: The achenes are eaten by waterfowl. Atlas of the Flora of the Great Plains by McGregor, *et al.* (1977) does not attribute this plant to region 5.

Frank's Sedge

Carex frankii Kunth

Family: Sedge (Cyperaceae)

May-September

Field Marks: This sedge has its cylindrical spikes nestled down among leafy bracts that are 2-4 times longer than the spikes. The male flowers are borne in a separate spike.





Local Notes:



Habitat: Swamps, floodplain woods, wet meadows, wet prairies, along rivers and streams, roadside ditches, around ponds and lakes.

Habit: Perennial herb with rhizomes.

Stems: Erect, smooth, up to 2 feet tall.

Leaves: Elongated, narrow, rough to the touch, up to 1/3 inch broad.

Flowers: Male and female flowers borne separately; the male flowers in a narrow, cylindrical spike up to 1 1/4 inches long; the female flowers in 3-6 dense, cylindrical spikes up to 1 1/2 inches long, much surpassed by leafy bracts.

Scales: Very narrow, minutely toothed, awn-like, longer than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium reversely cone-shaped, tapering to the base, conspicuously nerved, depressed at the summit where the conspicuous 2-toothed beak arises; the entire perigynium up to 1/4 inch long.

Fruits: Achenes obovoid, about 1/10 inch long.

Notes: The achenes are eaten by waterfowl.

Meadow Sedge

Carex granularis Muhl.

Family: Sedge (Cyperaceae)

April-July

Field Marks: This species has male spikes separate from the female spikes and beakless perigynia about 1/8 inch long.





Local Notes:



Habitat: Wet woods, swamps, along streams, wet meadows, wet prairies.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth, pale green to bluish, up to 2 1/2 feet tall.

Leaves: Elongated, narrow, usually rough along the edges, up to 1/3 inch broad.

Flowers: Male and female flowers borne separately; the male flowers in slender, solitary spikes up to 1 1/4 inches long; the pistillate flowers in 2-4 narrow cylindric spikes up to 1 inch long.

Scales: Narrowly ovate, tapering to a short point.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium ovoid to obovoid, up to 1/8 inch long, tapering to a very short beak.

Fruits: Achenes smooth, obovoid, about 1/10 inch long.

Gray's Sedge
Carex grayii Carey

Family: Sedge (Cyperaceae)

May-October

Field Marks: The large spherical female spikes that resemble a mace from the knights of old easily distinguish this sedge.





Local Notes:



Habitat: Wet woods, swamps, floodplain woods.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth, 3-angled, up to 3 feet tall.

Leaves: Elongated, narrow, often longer than the flowering stem, dark green, smooth, up to 1/2 inch broad.

Flowers: Male and female flowers borne in separate spikes; the male flowers in a single narrow spike up to 2 inches long; the female flowers crowded into 1-2 dense, spherical heads resembling a mace from the knights of old, up to 1 1/4 inches in diameter, containing 6-30 perigynia.

Sepals: 0.

Petals: 0.

Scales: Ovate, rounded but usually with a short mucro at the tip, pale along the edges, about 1/3 as long as the perigynia.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium ovoid, smooth or short-hairy, up to 3/4 inch long, ribbed, abruptly contracted into a long beak 2-toothed at the tip.

Fruits: Achenes triangular, smooth.

Notes: Although most specimens are completely smooth, others may have slightly hairy leaves and perigynia. The achenes are eaten by waterfowl.

Thinscale Sedge

Carex hyalinolepis Steud.

Family: Sedge (Cyperaceae)

May-July

Field Marks: This *Carex* differs from all others by its bluish color, the presence of 2-6 slender male spikes, and its 2-4 female spikes up to 4 inches long and up to 1 inch thick.





Local Notes:



Habitat: Swampy woods, wet roadside ditches, wet meadows, wet prairies, in sloughs.

Habit: Stout, tufted perennial with extensive creeping rhizomes.

Stems: Erect, up to 4 feet tall, smooth.

Leaves: Long, narrow, blue-green, up to 1/2 inch broad, sometimes with cross-veins.

Flowers: 1 per spikelet, with many spikelets in a spike and both male and female spikes present. Male spikes 2-6, very slender, terminal, up to 2 1/2 inches long. Female spikes 2-4, erect or drooping, up to 4 inches long and up to 1 inch thick.

Sepals: 0.

Petals: 0.

Scales: One per flower, brown to purple-brown, shiny, slightly shorter or slightly longer than the perigynium, pointed at the tip.

Stamens: 3.

Styles: 3.

Pistils: Enclosed by a sac-like perigynium; perigynium ovoid, 1/4-1/3 inch long, with conspicuous veins and a slender terminal beak with 2 short teeth, smooth.

Fruits: Achenes enclosed by the perigynium, obvoid, 1/10 inch long.

Notes: The achenes of this species are eaten by waterfowl. This sedge can withstand inundation for long periods of time.

Inland Sedge

Carex interior L. H. Bailey

Family: Sedge (Cyperaceae)

April-June

Field Marks: The small cluster of female spikes is widely separated on the stem. The tips of the perigynia radiate to resemble a tiny star. The male flowers are borne below the female spikes. The leaves are very narrow.





Local Notes:



Habitat: Swamps, wet meadows.

Habit: Tufted annual with fibrous roots.

Stems: Erect, very slender, wiry, smooth, up to 1 1/2 feet tall.

Leaves: Elongated, very slender, smooth, about 1/12 inch broad, shorter than the flowering stem.

Flowers: Male and female flowers borne separately; the male flowers sparse, usually below the pistillate spikes; the pistillate spikes 2-4, widely separated, each consisting of 1-10 spreading perigynia.

Sepals: 0.

Petals: 0.

Scales: Ovate, obtuse, shorter than the perigynia.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium, narrowly ovate, flattened, sparsely veined, somewhat spongy near the base, up to 1/6 inch long, narrowed to a short, toothed beak.

Fruits: Achenes ovate, flattened, smooth.

Notes: The achenes are eaten by waterfowl. Although the National Wetlands Inventory lists area 2 in the range of this species, there is no evidence that it occurs in the southeastern United States.

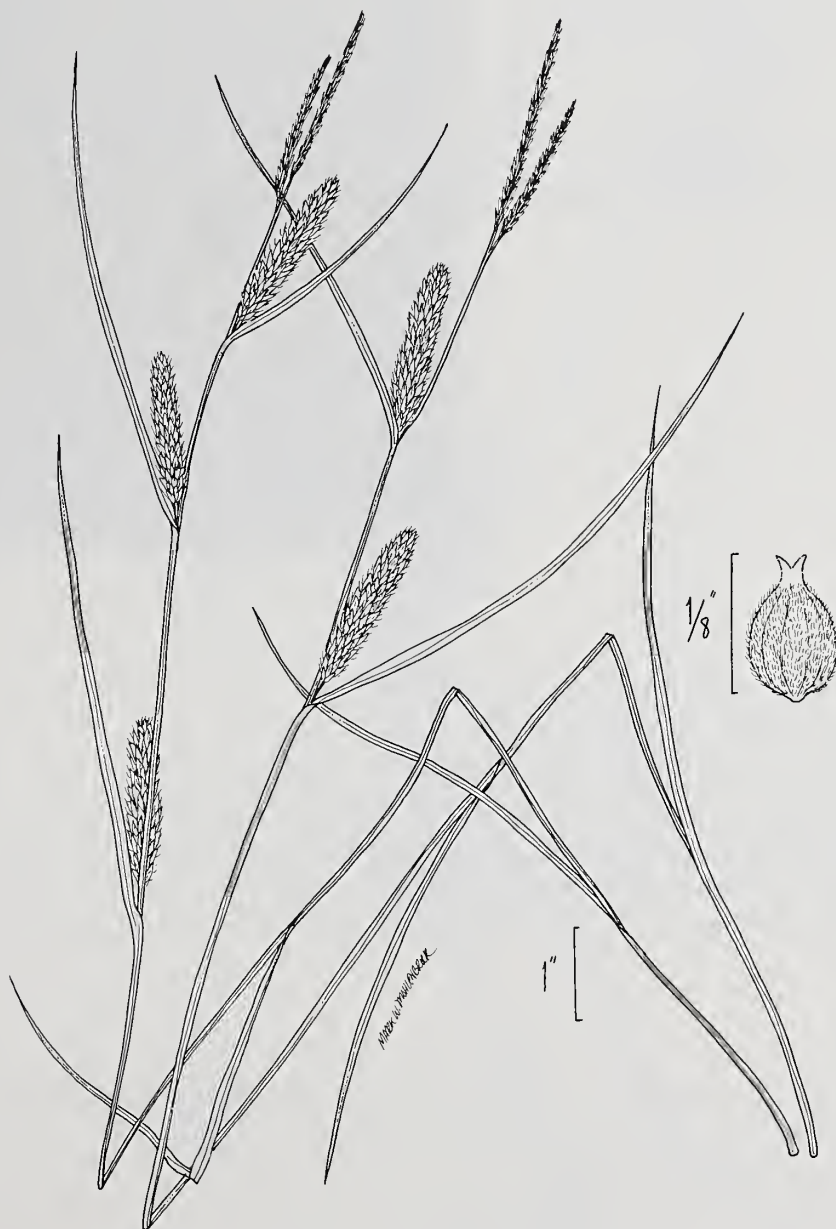
Bull Sedge

Carex lanuginosa Michx.

Family: Sedge (Cyperaceae)

April-July

Field Marks: This sedge has separate male and female spikes and hairy perigynia up to 1/8 inch long.





Local Notes:



Habitat: Wet meadows, wet prairies, swampy woods.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, rough to the touch, sharply triangular, up to 3 feet tall.

Leaves: Elongated, narrow, smooth except along the edges, up to 1/4 inch broad.

Flowers: Male and female borne in separate spikes; the male spikes 1-3 in number, more or less erect; the pistillate spikes 1-3, cylindrical, up to 2 inches long, erect.

Scales: Ovate, pointed or short-awned at the tip, shorter than or about as long as the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium oval to ovoid, hairy, with a short, 2-toothed beak, up to 1/8 inch long.

Fruits: Achenes triangular, smooth.

Notes: The achenes are eaten by waterfowl.

Hop Sedge

Carex lupulina Muhl.

Family: Sedge (Cyperaceae)

May-September

Field Marks: The large, cylindrical female spikes up to 2 1/2 inches long readily distinguish this species.





Local Notes:



Habitat: Wet woods, wet prairies, roadside ditches.

Habit: Perennial herb with a short rhizome.

Stems: Erect, smooth, up to 4 feet tall.

Leaves: Elongated, narrow, longer than the stems, up to 2/3 inch broad.

Flowers: Male and female flowers borne in separate spikes; the male spike single, slender, up to 3 inches long; female spikes 2-5 per stem, cylindrical, up to 2 1/2 inches long.

Scales: Lanceolate, pointed or short-awned at tip, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium ovoid, inflated at the base, abruptly tapering to a narrow beak sharply 2-toothed at the tip, smooth, up to 3/4 inch long.

Fruits: Achenes triangular, smooth, up to 1/6 inch long.

Notes: The achenes are eaten by waterfowl.

Lurid Sedge

Carex lurida Wahlenb.

Family: Sedge (Cyperaceae)

May-September

Field Marks: This species has slender male spikes and short, thick female spikes. The perigynia are inflated at the base and taper abruptly to a slender, 2-toothed beak.





Local Notes:



Habitat: Around lakes and ponds, along streams, wet meadows, wet prairies.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, usually smooth, up to 2 1/2 feet tall.

Leaves: Elongated, narrow, rough to the touch, up to 1/2 inch broad.

Flowers: Male and female flowers borne separately; the male in a single, slender spike up to 3 inches long; the female in 1-4 oblong-cylindric spikes up to 2 inches long and up to 1 inch thick.

Scales: Broadly lanceolate, tapering to a slender awn; the scale shorter than the perigynium.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium ovoid, inflated, strongly ribbed, up to 1/2 inch long, tapering to a beak about as long as the body.

Fruits: Achenes slightly granular, triangular, obovoid, up to 1/8 inch long.

Notes: The achenes are eaten by waterfowl. Atlas of the Flora of the Great Plains by McGregor, *et al.* (1981) does not attribute this species to areas 4 or 5, although the National Wetlands Inventory lists it from there.

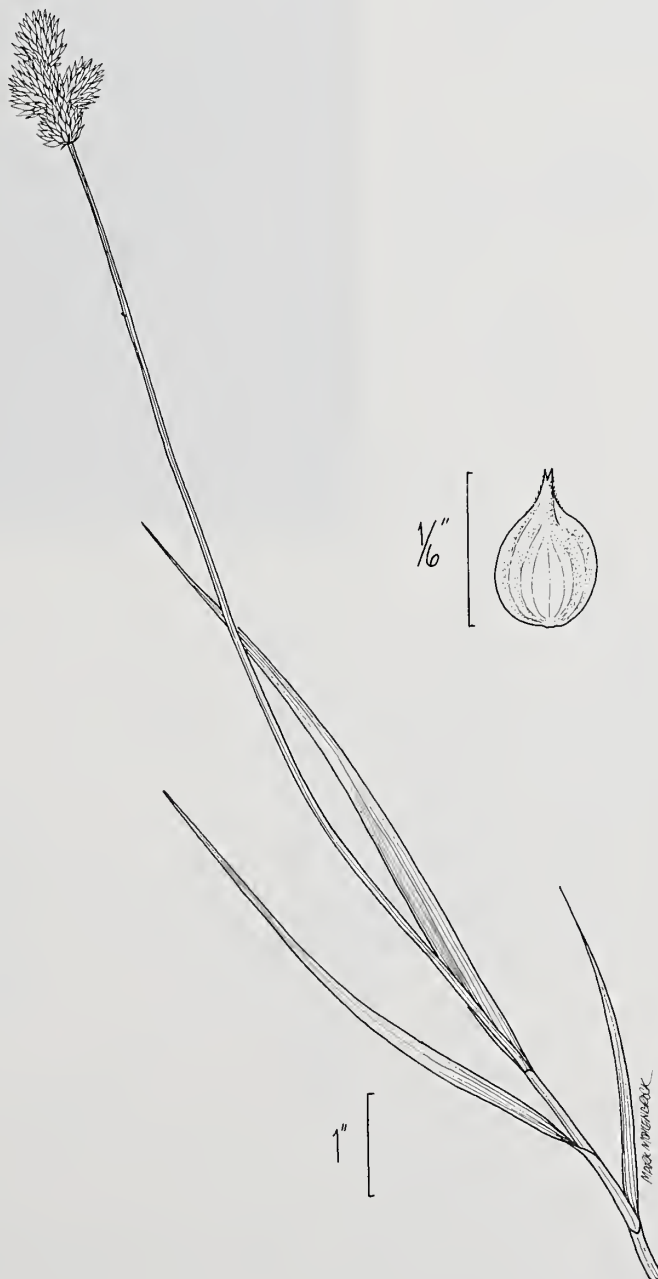
Troublesome Sedge

Carex molesta Mackenz.

Family: Sedge (Cyperaceae)

May-July

Field Marks: This species usually has crowded heads and ovate perigynia usually at least 1/6 inch long and at least 1/10 inch broad.





Local Notes:



Habitat: Wet prairies, floodplain forests; also in drier habitats.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, not hairy, up to 3 feet tall.

Leaves: Elongated, narrow, up to 1/6 inch broad.

Flowers: Male and female borne separately; the male at the base of each spike; the spikes rounded at the tip, crowded, up to 1/3 inch long.

Scales: Lanceolate, tapering to the tip, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium ovate, at least 1/6 inch long and at least 1/10 inch broad.

Fruits: Achenes smooth, about 1/8 inch long.

Notes: The achenes are eaten by waterfowl. Although the National Wetlands Inventory lists this species from areas 6 and 10, it is not attributed to Oklahoma or Texas by Correll and Correll in Aquatic and Wetland Flora of Southwestern United States (1975) or to California by Hitchcock and Cronquist in Flora of the Pacific Northwest (1973).

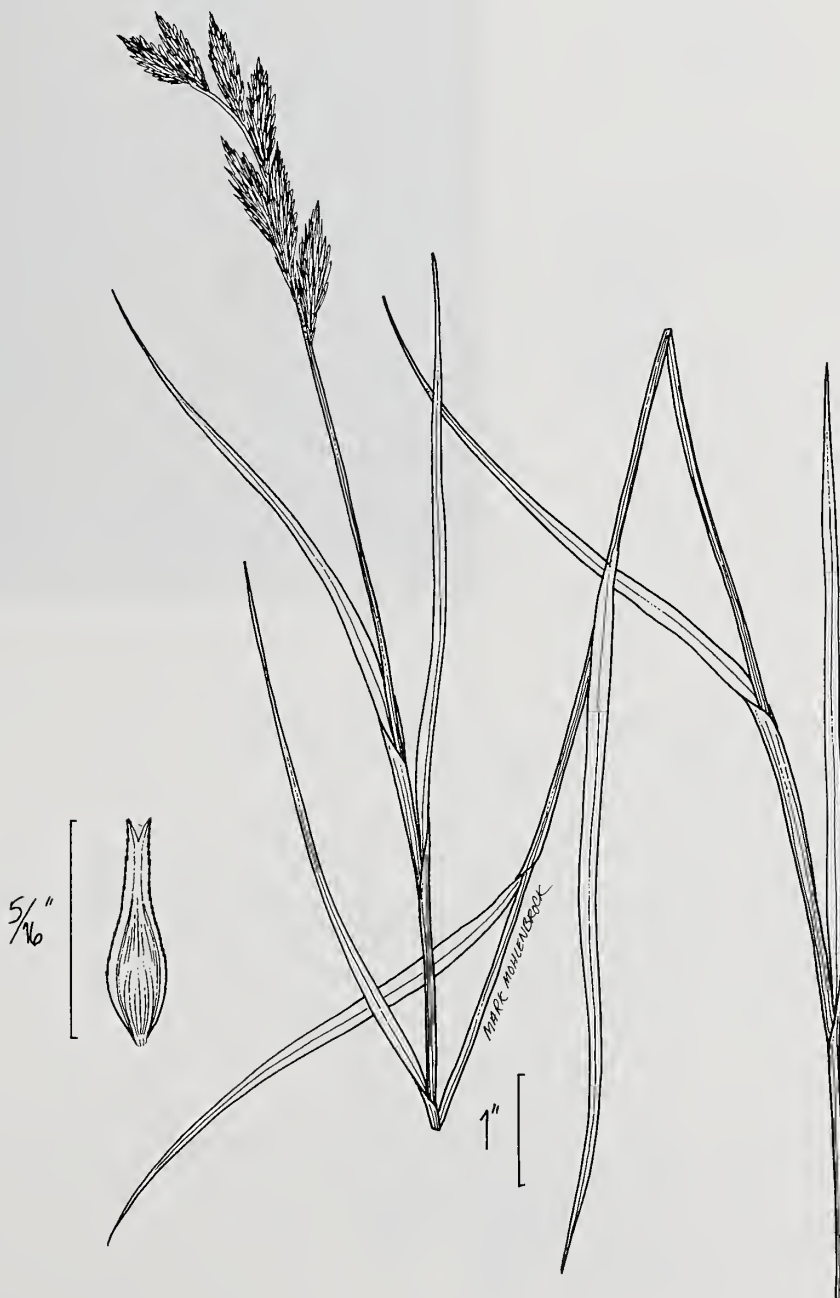
Muskingum Sedge

Carex muskingumensis Schweinitz

Family: Sedge (Cyperaceae)

May-October

Field Marks: This species is readily distinguished by its long, pointed, narrowly elliptical spikes. The perigynia are long and narrow.





Local Notes:



Habitat: Swamps, floodplain woods, bottomland hardwood forests.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, rough to the touch, up to 3 feet tall.

Leaves: Elongated, narrow, shorter than the stems, smooth, up to 1/4 inch broad.

Flowers: Male and female flowers borne separately; the male flowers crowded at the base of the female spikelets; each female spikelet narrowly elliptic, pointed at the tip, up to 1 inch long.

Scales: Lanceolate to ovate, pointed or rounded at the tip, up to 1/6 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium flat, lanceolate, up to 1/2 inch long, finely toothed along the margins and 2-toothed at the tip.

Fruits: Achenes smooth, narrowly oblong, about 1/16 inch long.

Notes: The achenes are eaten by waterfowl.

Carex normalis Mackenz.

Family: Sedge (Cyperaceae)

May-July

Field Marks: The male flowers are located below the female flowers. This species has spikelets one above the other and barely overlapping. The perigynia are ovate.





Local Notes:



Habitat: Wet woods, swamps, along streams, around ponds, wet prairies.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect or spreading, triangular, rough to the touch, up to 3 1/2 feet tall.

Leaves: Elongated, narrow, shorter than the stems, smooth, up to 1/6 inch broad.

Flowers: Male and female flowers borne separately; the male flowers crowded at the base of the female spikelets; each female spikelet usually one above the other and barely overlapping, up to 1/2 inch long.

Scales: Ovate, more or less rounded at the tip, up to 1/8 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium flat, ovate, up to 1/4 inch long, with a short 2-toothed beak.

Fruits: Achenes smooth, about 1/16 inch long.

Notes: Waterfowl eat the seeds of this species.

Beaded-broom Sedge

Carex projecta Mackenz.

Family: Sedge (Cyperaceae)

May-October

Field Marks: This sedge is distinguished by its narrowly lanceolate perigynia and its spikes not overlapping. The few male flowers are borne below the female flowers.





Local Notes:



Habitat: Wet prairies, swamps, floodplain woods.

Habit: Perennial herb with a thickened rootstock.

Stems: Erect, rough to the touch, up to 2 feet tall, some of the stems not bearing spikelets.

Leaves: Elongated, narrow, up to 1/6 inch broad.

Flowers: Male and female flowers borne separately but in the same spikelet; the male flowers below the female; the spikelets not overlapping but separated, up to 1/3 inch long.

Scales: Ovate to lanceolate, rounded or pointed at the tip, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium lanceolate, spreading, up to 1/8 inch long.

Fruits: Achenes about 1/16 inch long.

Notes: The achenes are eaten by waterfowl.

Broom Sedge

Carex scoparia Schkuhr

Family: Sedge (Cyperaceae)

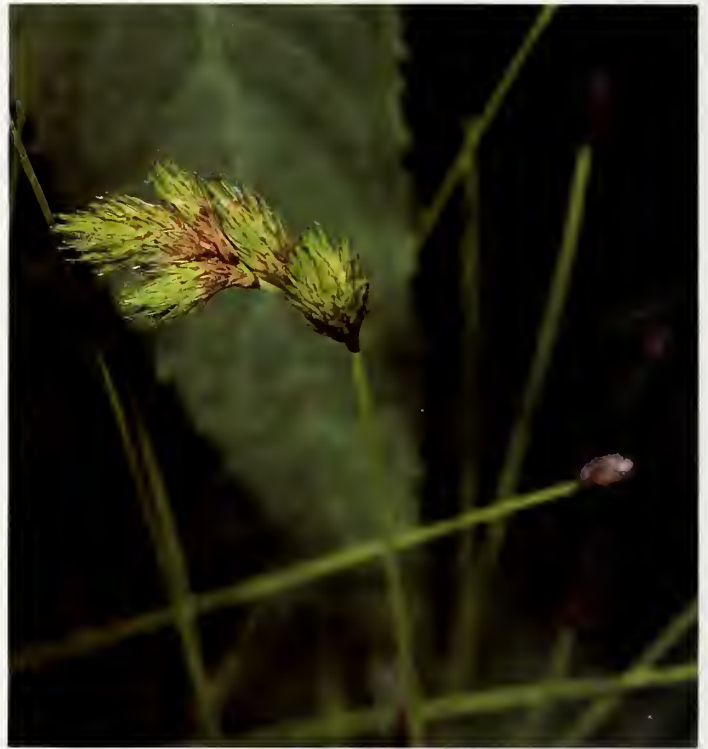
May-July

Field Marks: This species is characterized by its lanceolate perigynia with a narrow, whitish margin and its partially overlapping, pointed spikelets.





Local Notes:



Habitat: Wet prairies, roadside ditches, around ponds.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, slender, rough to the touch, up to 2 1/2 feet tall.

Leaves: Elongated, narrow, smooth, up to 1/8 inch broad.

Flowers: Male and female flowers borne separately; the male at the base of the female spikelets; the female spikelets partially overlapping, oblongoid, pointed at the tip, up to 2/3 inch long.

Scales: Lanceolate, pointed at the tip, smooth, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium lanceolate, narrowed to a finely toothed tip, with a narrow, whitish margin, up to 1/4 inch long.

Fruits: Achenes flat, about 1/16 inch long.

Notes: The choice of the common name, broom sedge, is an extremely poor one, since this plant is totally unrelated to the common broom sedge grass.

Short's Sedge
Carex shortiana Dewey

Family: Sedge (Cyperaceae)

May-July

Field Marks: This sedge has the male flowers below the female flowers. The perigynia quickly turn brown and are tightly packed together vertically.





Local Notes:



Habitat: Wet prairies, swamps, roadside ditches, around ponds and lakes.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, rough to the touch but not hairy, up to 3 feet tall.

Leaves: Elongated, narrow, overtopping the flowering stem, rough along the edges, up to 1/3 inch broad.

Flowers: Male and female borne separately; the male borne below the female; both in narrow, cylindrical spikes up to 1 1/2 inches long.

Scales: Broadly lanceolate, tapering to the tip and with a short awn, longer than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium obovate, flattened, minutely beaked, quickly turning brown; all the perigynia in a spike tightly packed together vertically.

Fruits: Achenes smooth, about 1/16 inch long.

Notes: The achenes of this species are eaten by waterfowl.

Squarrose Sedge

Carex squarrosa L.

Family: Sedge (Cyperaceae)

April-September

Field Marks: This species has male flowers below the female flowers. The female spikes are ovoid, with some of the lower perigynia pointing downward.





Local Notes:



Habitat: Swamps, wet woods, wet prairies, wet meadows.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, triangular, rough to the touch, up to 3 feet tall.

Leaves: Elongated, narrow, usually a little longer than the stems, up to 1/4 inch broad.

Flowers: Male and female flowers borne separately; the male flowers below the female, the spikes 1-3, oblongoid to nearly spherical, up to 1 1/2 inches long, up to 3/4 inch broad; the lowermost perigynia pointing downward.

Scales: Lanceolate, tapering to a point or a short awn, shorter than the perigynia.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium obovoid, somewhat inflated, up to 1/3 inch long, tapering to a finely toothed beak.

Fruits: Achenes smooth, ellipsoid, up to 1/8 inch long.

Notes: The achenes are eaten by waterfowl.

Sawbeak Sedge

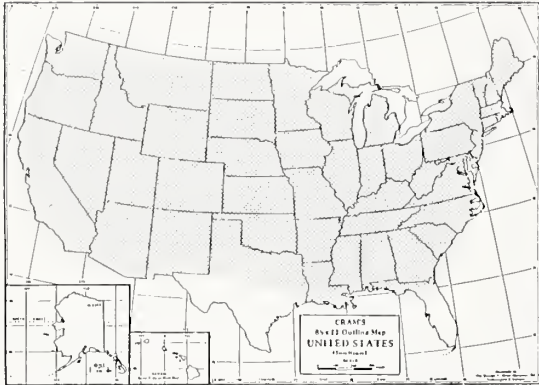
Carex stipata Muhl.

Family: Sedge (Cyperaceae)

May-July

Field Marks: The stems of this sedge are strongly triangular and soft or even hollow.





Local Notes:



Habitat: Wet woods, wet prairies, swamps; along rivers and streams.

Habit: Perennial herb with a thickened rootstock.

Stems: Erect, strongly triangular and somewhat spongy, often narrowly winged, up to 3 1/2 feet tall.

Leaves: Elongated, shorter than the flowering stem, smooth, up to 1/3 inch broad.

Flowers: Male and female flowers borne separately; the male flowers few in number and situated at the tip of the pistillate spikes; the pistillate spikes numerous and crowded into elongated heads up to 4 inches long.

Sepals: 0.

Petals: 0.

Scales: Lanceolate to ovate, tapering to a narrow, toothed tip, much shorter than the perigynia.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium lanceoloid, rounded and spongy at the base, strongly ribbed, up to 1/6 inch long, narrowed above into a slender, minutely toothed beak.

Fruits: Achenes flattened, smooth.

Notes: The common name, sawtooth sedge, is extremely inappropriate for this species.

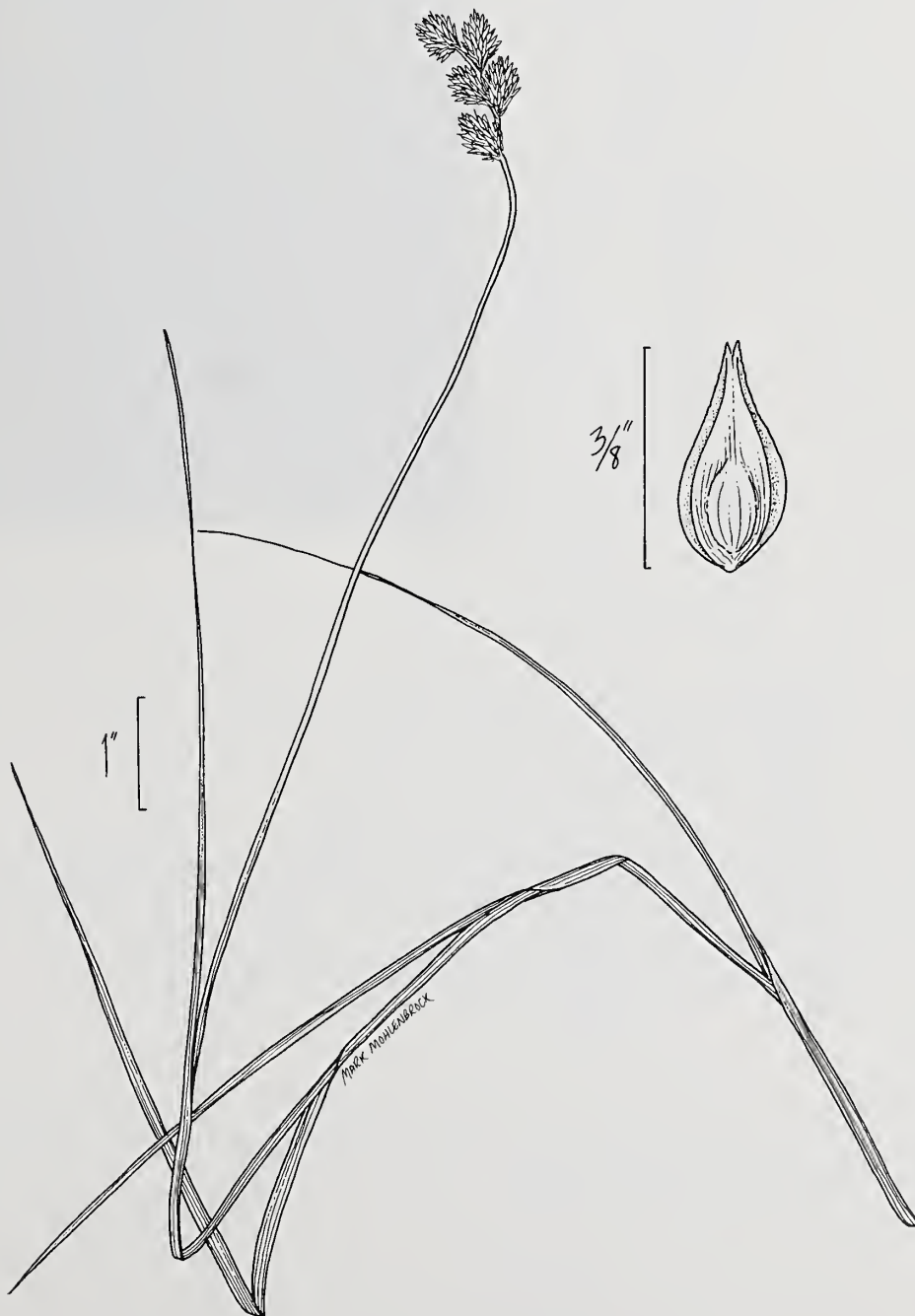
Slender Sedge

Carex tenera Dewey

Family: Sedge (Cyperaceae)

April-June

Field Marks: The spikes of this species are not overlapping. The perigynia are ovate to narrowly ovate.





Local Notes:



Habitat: Wet woods, around ponds and lakes, roadside ditches.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth, up to 2 1/2 feet tall.

Leaves: Elongated, narrow, smooth, up to 1/10 inch broad.

Flowers: Male and female flowers borne separately; the male crowded at the base of the female spikelets; the spikelets rounded or somewhat pointed, usually not overlapping and sometimes widely separated, up to 2/5 inch long.

Scales: Broadly lanceolate, rounded or pointed at the tip, about 1/10 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium flat, narrowly ovate to ovate, up to 1/6 inch long.

Fruits: Achenes smooth, 1/16 inch long.

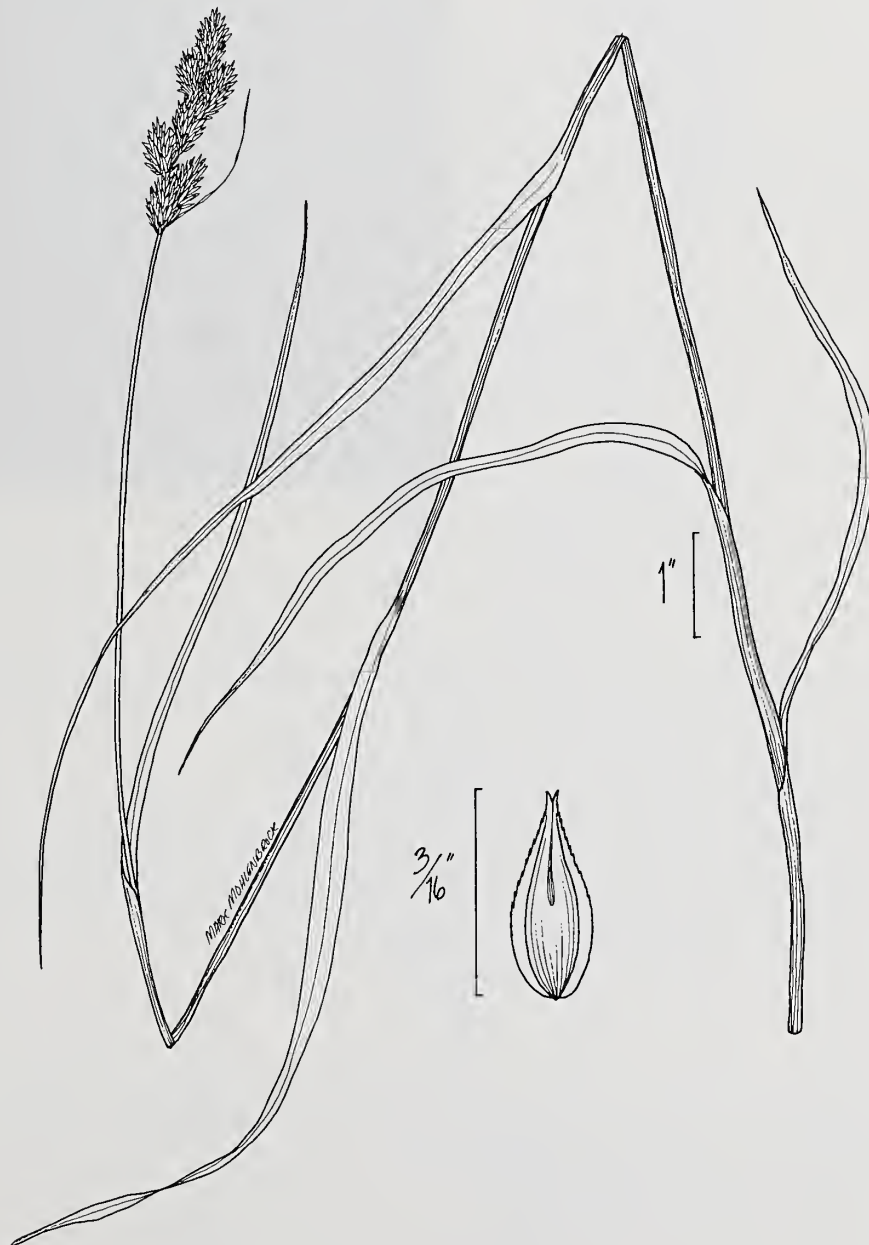
Bristlebract Sedge

Carex tribuloides Wahlenb.

Family: Sedge (Cyperaceae)

May-August

Field Marks: This species has crowded heads and thin, lanceolate perigynia about 1/16 inch broad.





Local Notes:



Habitat: Swamps, wet woods, wet prairies, along streams, around ponds and lakes, wet meadows.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, rough to the touch, up to 2 1/2 feet tall.

Leaves: Elongated, narrow, usually shorter than the stems, up to 1/3 inch broad.

Flowers: Male and female flowers borne separately; the male flowers crowded at the base of the female spikelets; the female spikelets crowded in terminal clusters, obovoid, about 1/2 inch long.

Scales: Lanceolate, pointed at the tip, about 1/8 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium flat, broadly lanceolate, up to 1/6 inch long, with a finely toothed beak 2-toothed at the tip.

Fruits: Achenes smooth, 1/16 inch long.

Notes: Waterfowl eat the seeds of this species.

Cattail Sedge

Carex typhina Michx.

Family: Sedge (Cyperaceae)

April-September

Field Marks: This species is recognized by its thick, cylindrical female heads with the male flowers below. The beaks of the perigynia point outward or upward, not downward.





Local Notes:



Habitat: Wet woods, swamps, wet prairies.

Habit: Tufted perennial herb with thickened rootstocks.

Stems: Erect, slender, rough to the touch, up to 2 feet tall.

Leaves: Elongated, narrow, longer than the stem, up to 1/4 inch broad.

Flowers: Male and female flowers borne separately; the male flowers at the base of some of the female spikes; the female spikes 1-6 per stem, cylindric, up to 2 inches long, up to 1 inch broad.

Scales: Oblong to lanceolate, rounded or pointed at the tip.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; each perigynium obovoid, inflated at the base, abruptly tapering to a 2-toothed beak, up to 1/3 inch long.

Fruits: Achenes triangular, obovoid, up to 1/10 inch long.

Notes: The achenes are eaten by waterfowl.

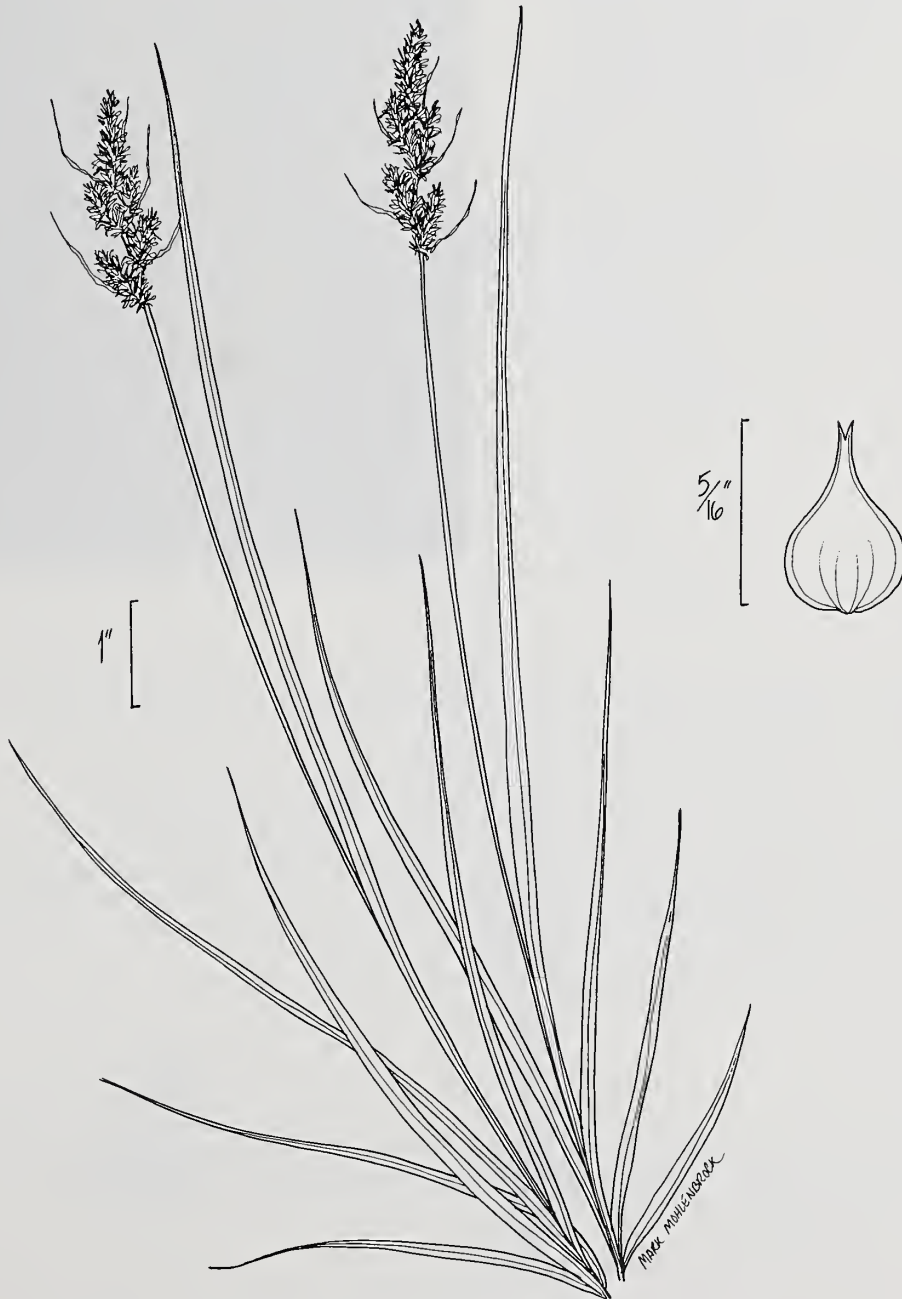
Fox Sedge

Carex vulpinoidea Michx.

Family: Sedge (Cyperaceae)

May-July

Field Marks: Fox sedge has elongated spikes containing 10 or more spikelets, the lowest of which is subtended by a slender, long bract.





Local Notes:



Habitat: Along rivers and streams, around lakes and ponds, wet prairies, wet woods, swamps.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, slender, sharply triangular, rough to the touch, up to 3 feet tall.

Leaves: Elongated, narrow, longer than the stems, smooth, up to 1/6 inch broad.

Flowers: Male and female flowers borne separately; the male at the tips of the female spikelets, with 10 or more female spikelets in a terminal spike up to 5 inches long; the lowermost spikelet subtended by a long, narrow bract.

Scales: Lanceolate, usually tapering to an awn at the tip, smooth.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Enclosed in a perigynium; the perigynium ovoid or suborbicular below, abruptly tapering to a slender beak about half the length of the perigynium, yellowish, without nerves.

Fruits: Achenes flat, up to 1/16 inch long.

Notes: The achenes are eaten by waterfowl.

Taperleaf Flatsedge

Cyperus acuminatus Torr. & Hook.

Family: Sedge (Cyperaceae)

June-October

Field Marks: This species is distinguished by its spikelets, which are in compact, spherical masses, by its flat spikelets, its annual growth form, and its generally short stature.





Local Notes:



Habitat: Along rivers and streams, around ponds and lakes, fallow fields, sandy banks.

Habit: Annual herb with fibrous roots.

Stems: Erect, slender, smooth, usually longer than the leaves, up to 15 inches tall.

Leaves: Elongated, narrow, smooth, usually pale green, up to 1/12 inch broad.

Flowers: Borne in spikelets, each flower subtended by a scale; spikelets several in a compact, spherical mass, flat, oblong, up to 1/3 inch long.

Scales: Oblong, straw-colored to pale green, pointed at the slightly recurved tip.

Sepals: 0.

Petals: 0.

Stamens: 1.

Pistils: Ovary superior; style 3-cleft.

Fruits: Achenes triangular, oblong, tapering to each end, gray, half as long as the scale.

Notes: The achenes are eaten by waterfowl.

Redroot Flatsedge

Cyperus erythrorhizos

Family: Sedge (Cyperaceae)

July-October

Field Marks: This flatsedge differs from all similar species by its extremely tiny, reddish brown scales of the spikelets and by its very small, ivory-colored achenes.





Local Notes:



Habitat: Along streams and rivers, around ponds and lakes, in sloughs.

Habit: Tufted annual with reddish roots.

Stems: Erect, smooth, obscurely triangular, up to 2 1/2 feet tall.

Leaves: Long, narrow, rough along the edges, up to 1/2 inch broad.

Flowers: 1 per scale, with many scales per spikelet, the entire cluster of flat spikelets subtended by 3-7 leaflike bracts.

Sepals: 0.

Petals: 0.

Scales: Lanceolate, pointed, red-brown, shiny, about 1/10 inch long.

Stamens: 3.

Pistils: 1; styles 3; ovary superior.

Fruits: Achenes ivory-colored, shiny, about 1/20 inch long.

Notes: Dwarf plants only one inch tall have been known to flower. The tiny achenes are eaten by waterfowl.

Chufa Flatsedge

Cyperus esculentus L.

Family: Sedge (Cyperaceae)

July-October

Field Marks: This is the only flatsedge which produces underground tubers at the ends of slender rhizomes. Because the scales of the spikelets do not lie flat, each spikelet appears to be minutely toothed.





Local Notes:



Habitat: Wet fallow fields, old fields, wet prairies, along streams, around ponds and lakes.

Habit: Coarse perennial with slender rhizomes and tubers.

Stems: Erect, smooth, triangular, up to 2 1/2 feet tall.

Leaves: Long, narrow, smooth or rough along the edges, 1/3-1/2 inch broad.

Flowers: 1 per scale, with many scales per spikelet, the entire cluster of flat spikelets subtended by 3-9 leaflike bracts.

Sepals: 0.

Petals: 0.

Scales: Oblong, yellow or brown, pointed at the tip, 1/8-1/6 inch long.

Stamens: 3.

Pistils: 1; styles 3; ovary superior.

Fruits: Achenes yellowish, triangular, oblong, about 1/10 inch long.

Notes: This species is also called Nutgrass. The tubers are edible by humans, domesticated animals, and wildlife. The achenes are eaten by waterfowl.

Rusty Flatsedge

Cyperus ferrugineus Boeck.

Family: Sedge (Cyperaceae)

August-October

Field Marks: This *Cyperus* differs by its red-brown spikelets and its orange-brown achenes. It lacks underground rhizomes.





Local Notes:



Habitat: Along rivers and streams, around ponds and lakes, in roadside ditches, mud flats.

Habit: Annual herb with fibrous roots.

Stems: Erect, unbranched, smooth, up to 2 feet tall.

Leaves: Mostly near the base of the plant, elongated, narrow, smooth, up to 1/2 inch broad.

Flowers: 1 per scale, with many scales crowded into flat spikelets; the spikelets red-brown, linear, up to 1 inch long.

Sepals: 0.

Petals: 0.

Scales: Ovate to oblong, red-brown, rounded or pointed at the tip.

Stamens: 3.

Pistils: Ovary superior; styles 3.

Fruits: Achenes triangular, obovoid, smooth, orange-brown.

Notes: The achenes are eaten by waterfowl. The plant sometimes flowers when it is only 6 inches tall.

Yellow Flatsedge

Cyperus flavescens L.

Family: Sedge (Cyperaceae)

July-October

Field Marks: This species is distinguished by its straw-colored scales, its 2 styles, and its black achenes.





Local Notes:



Habitat: Moist, sandy soil along rivers and streams.

Habit: Annual herb with fibrous roots.

Stems: Erect, slender, smooth, usually longer than the leaves, up to 1 foot tall.

Leaves: Elongated, narrow, smooth, up to 1/10 inch broad.

Flowers: Borne in spikelets, each flower subtended by a scale; spikelets several in radiating clusters; some clusters on stalks, others sessile; each spikelet straw-colored, flat, up to 1 inch long, about 1/10 inch broad.

Scales: Ovate, obtuse but with a short mucro, straw-colored, smooth, up to 1/8 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; stigmas 2-cleft.

Fruits: Achenes obovoid, flat, black, shiny, about 1/20 inch long.

Notes: The achenes are eaten by waterfowl.

Fragrant Flatsedge

Cyperus odoratus L.

Family: Sedge (Cyperaceae)

August-October

Field Marks: This flatsedge has spikelets that arise from an elongated axis, brown scales, and gray or black achenes about 1/10 inch long.





Local Notes:



Habitat: Sandy or muddy soil along rivers and streams.

Habit: Annual herb with fibrous roots.

Stems: Erect, smooth, sharply triangular, up to 2 feet tall.

Leaves: Elongated, narrow, smooth, up to 1/3 inch broad.

Flowers: Borne in spikelets, each flower subtended by a scale; spikelets arising from an elongated axis, more or less cylindrical, brown to red-brown, up to 1 1/4 inches long.

Scales: Ovate to oblong, rounded or short-pointed at the tip, red-brown, smooth, up to 1/8 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; style 3-cleft.

Fruits: Achenes triangular, obovoid, gray or black, up to 1/10 inch long.

Green Flatsedge

Cyperus pseudovegetus Steud.

Family: Sedge (Cyperaceae)

June-October

Field Marks: This flatsedge can be distinguished by its short, ovate, green spikelets with curved scales and the presence of only 1 stamen in each flower.





Local Notes:



Habitat: Marshes, roadside ditches, wet prairies, swamps, around ponds and lakes.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth, obscurely triangular, up to 2 1/2 feet tall.

Leaves: Long, narrow, smooth along the edges, up to 1/4 inch broad.

Flowers: 1 per scale, with many scales per spikelet, each spikelet 1/8-1/4 inch long, ovate, green, the entire cluster of spikelets subtended by 4-6 leaflike bracts.

Sepals: 0.

Petals: 0.

Scales: Elongated, folded, curved, pale green, pointed at the tip, 1/10 inch long.

Stamens: 1.

Pistils: 1; styles 3; ovary superior.

Fruits: Achenes linear, curved, 1/20 inch long.

Notes: This species is sometimes known as *C. virens*. The achenes are eaten by waterfowl.

Slender Flatsedge

Cyperus rivularis Kunth

Family: Sedge (Cyperaceae)

July-October

Field Marks: This flatsedge differs by its 2 styles cleft only to about the middle and its reddish scales. The spikelets are less than 1/8 inch wide.





Local Notes:



Habitat: Sandy soil along rivers, wet meadows, along streams.

Habit: Annual herb with fibrous roots.

Stems: Tufted, erect, slender, unbranched, smooth, up to 15 inches long.

Leaves: Mostly at the base of the plant, elongated, up to 1/10 inch broad.

Flowers: 1 per scale, with several scales comprising a spikelet; each spikelet up to 3/4 inch long and up to 1/8 inch wide, reddish; the cluster of spikelets subtended by 3 leaf-like bracts.

Sepals: 0.

Petals: 0.

Scales: Ovate, rounded at the tip, reddish.

Stamens: 2.

Pistils: Ovary superior; styles 2-cleft to about the middle.

Fruits: Achenes oblong, more or less flattened, dull, up to 1/10 inch long.

Notes: The achenes are eaten by waterfowl.

Strawcolored Nutsedge

Cyperus strigosus L.

Family: Sedge (Cyperaceae)

July-October

Field Marks: This sedge is distinguished by its slender-pointed, straw-colored spikelets with pointed scales.





Local Notes:



Habitat: Moist fallow fields, wet prairies, along streams, around ponds and lakes.

Habit: Usually stout perennial with short, thick rhizomes.

Stems: Erect, smooth, triangular, up to 3 feet tall.

Leaves: Long, narrow, somewhat rough along the edges, up to 1/3 inch broad.

Flowers: 1 per scale, with many scales per spikelet, each spikelet narrowed to a slender point, straw-colored, up to 1 inch long, the entire cluster of spikelets subtended by 3-8 leaflike bracts.

Sepals: 0.

Petals: 0.

Scales: Broadly lanceolate, pointed at the tip, yellow to straw-colored, 1/8-1/4 inch long.

Stamens: 3.

Pistils: 1; styles 3; ovary superior.

Fruits: Achene narrowly oblong, 3-angled, reddish, 1/20-1/10 inch long.

Notes: This rather variable species may bloom when the plants are only 1 inch tall. The achenes are eaten by waterfowl.

Three-way Sedge

Dulichium arundinaceum (L.) Britton

Family: Sedge (Cyperaceae)

July-September

Field Marks: This is one of the easiest sedges to recognize, even if not flowering, because of the perfect three ranks in which the leaves are arranged. (Look straight down on the plant to observe this.) The stems are hollow.





Local Notes:



Habitat: Swamps; bogs; sink-hole ponds.

Habit: Perennial herb with extensive rhizomes.

Stems: Erect, jointed, smooth, round or only obscurely triangular, hollow, up to 3 feet tall.

Leaves: Alternate, simple, linear, perfectly 3-ranked, pointed at the tip, smooth or slightly rough along the edge, up to 3 inches long, about 1/4 inch broad.

Flowers: 1 per scale, with many scales per spikelet, each spikelet pointed at the tip, up to 1 inch long.

Sepals: 0.

Petals: 0.

Scales: Brownish green, pointed, up to 1/3 inch long.

Stamens: 3.

Pistils: 1; styles 2; ovary superior.

Fruits: Achenes are eaten by waterfowl.

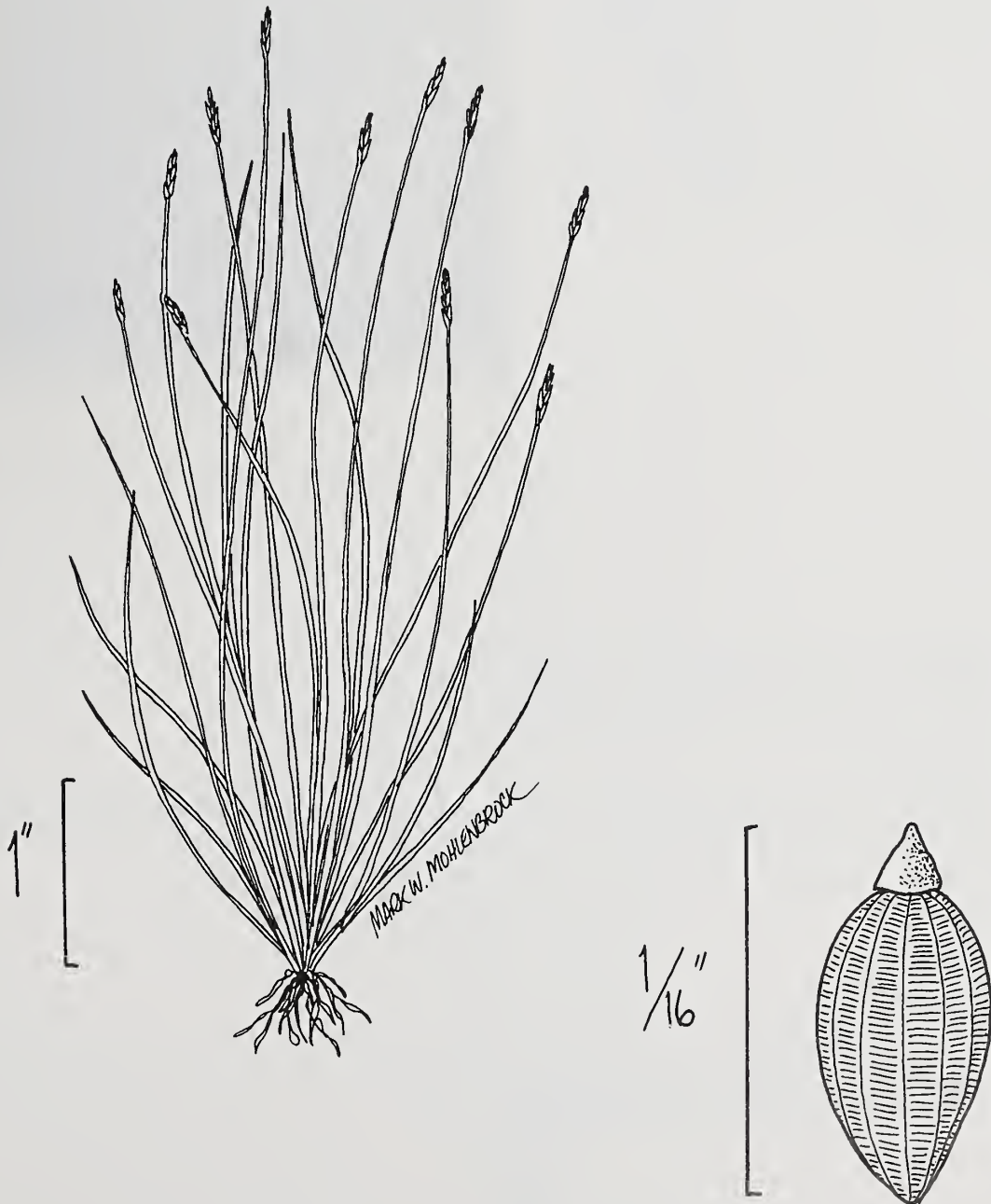
Needle Spikerush

Eleocharis acicularis (L.) Roem. & J. A. Schultes

Family: Sedge (Cyperaceae)

June-October

Field Marks: This species is readily distinguished from other spikerushes by its thread-like stems and tiny, sharply pointed spikelets.





Local Notes:



Habitat: Around ponds and lakes, edge of marshes.

Habit: Perennial herb with slender stolons.

Stems: Erect or usually matted, thread-like, smooth, up to 6 inches long.

Leaves: 0.

Flowers: Borne in single spikelets at the tip of each stem; the spikelets lanceoloid, sharply pointed at the tip, up to 1/4 inch long.

Scales: Oblong, rounded or slightly pointed at the tip, up to 1/10 inch long.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; style 3-cleft.

Fruits: Achenes obovoid, yellowish, shiny, with a network pattern on the surface, up to 1/16 inch long, with a cone-shaped tubercle on the top.

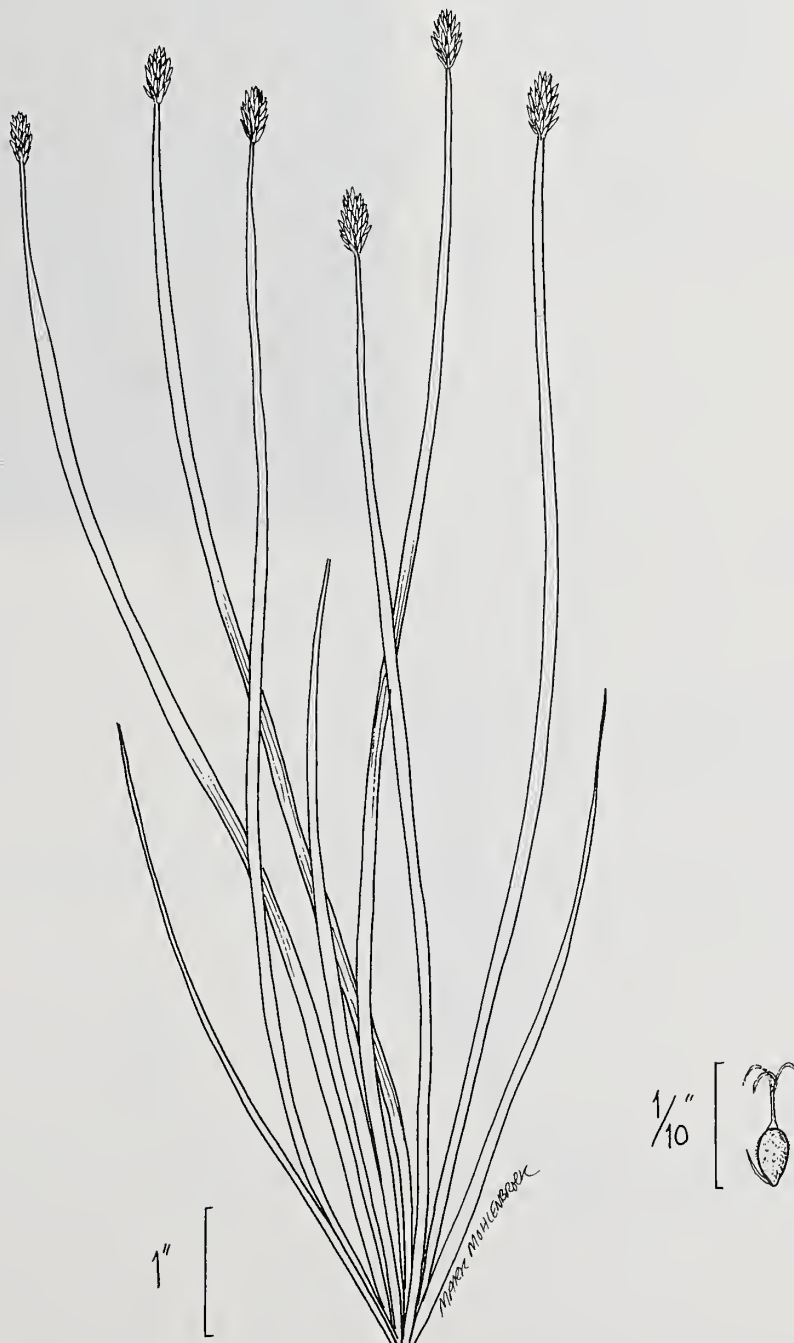
Flat-stemmed Spikerush

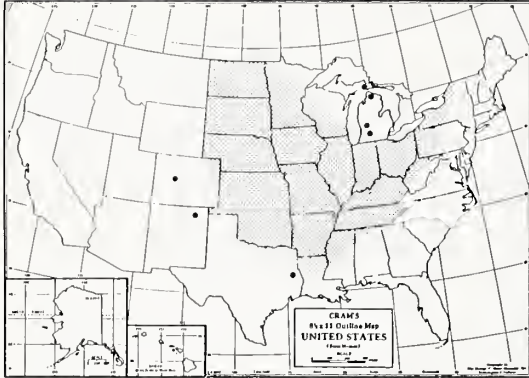
Eleocharis compressa Sullivant

Family: Sedge (Cyperaceae)

May-July

Field Marks: The stems, which are flattened just beneath the spikelets, distinguish this species.





Local Notes:



Habitat: Wet prairies, roadside ditches.

Habit: Perennial herb with stout rootstocks.

Stems: Erect, flattened at least just below the spikelet, smooth, up to 2 feet tall.

Leaves: 0.

Flowers: Crowded into a solitary, terminal spikelet; the spikelet ovoid to oblongoid, pointed at the tip, up to 1/2 inch long.

Scales: Oblong to narrowly ovate.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; style 3-cleft.

Fruits: Achenes obovoid, 3-angled, pale yellow-brown, slightly warty, with a short, flat, pointed tubercle, subtended by 1-5 slender bristles.

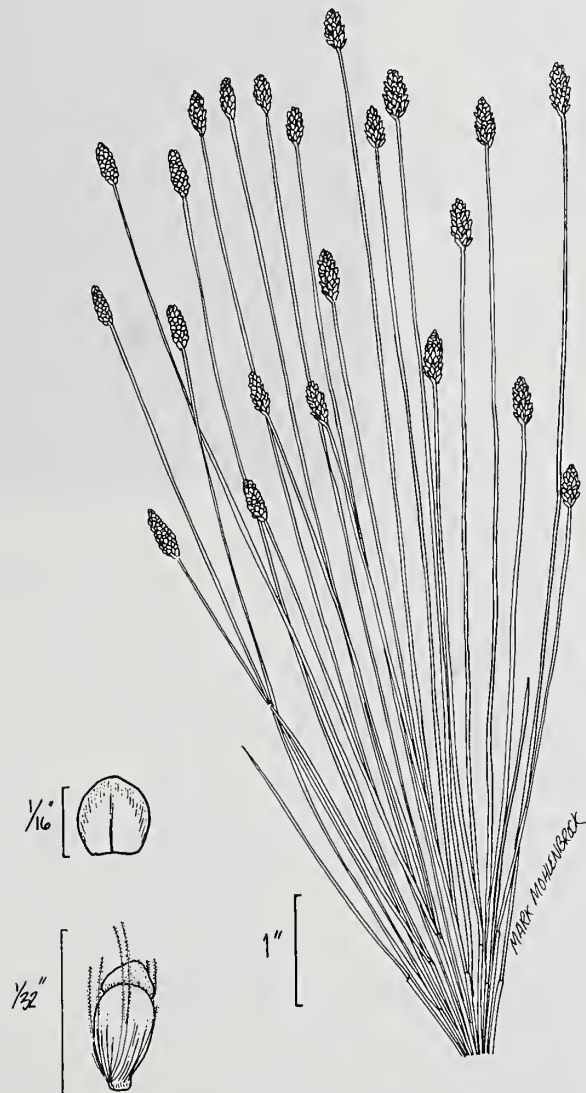
Blunt Spikerush

Eleocharis obtusa (L.) J. A. Schultes

Family: Sedge (Cyperaceae)

June-October

Field Marks: The distinguishing features of this spikerush are the very blunt spikelets up to 1/2 inch long.





Local Notes:



Habitat: Roadside ditches, along streams and rivers, around ponds and lakes.

Habit: Tufted annual from fibrous roots.

Stems: Erect, smooth, unbranched, up to 18 inches long.

Leaves: Reduced to sheaths.

Flowers: 1 per scale, with several scales per spikelet, each spikelet ovoid to ellipsoid, rounded or slightly pointed at the tip, up to 1/2 inch long.

Sepals: 0.

Petals: 0.

Scales: Ovate to obovate, usually rounded at the tip, brown, 1/16-1/10 inch long.

Stamens: 3.

Pistils: 1; styles 2 or 3; ovary superior.

Fruits: Achenes yellow to brown, shiny, obovoid, about 1/20 inch long, capped by a small, flat tubercle, subtended by 6 barbed bristles.

Notes: The achenes are eaten by waterfowl.

Creeping Spikerush

Eleocharis palustris (Roem.) J. A. Schultes

Family: Sedge (Cyperaceae)

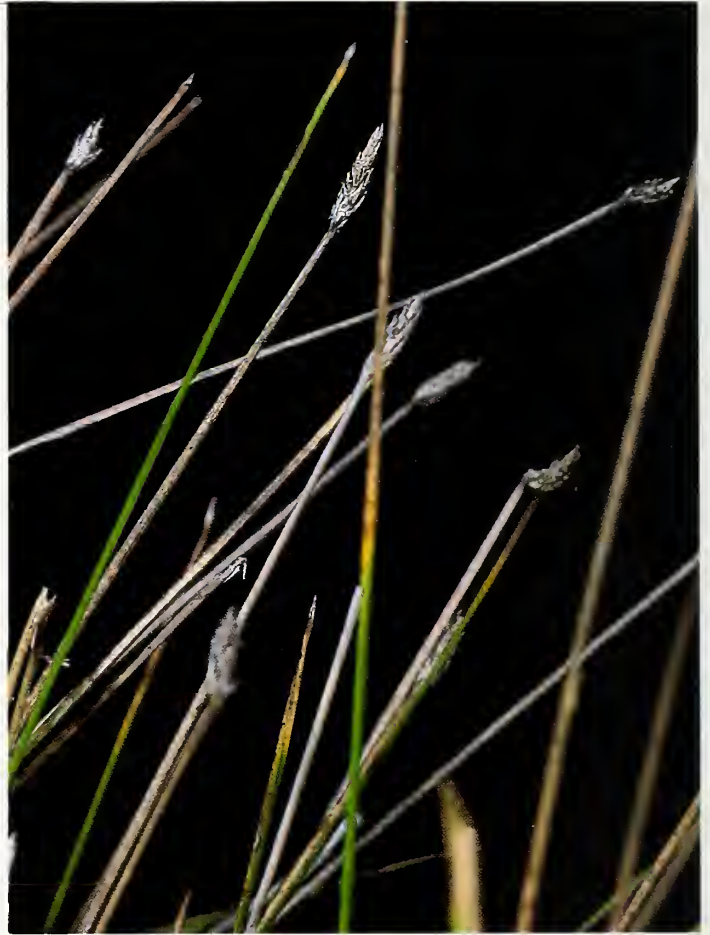
June-August

Field Marks: This spikerush may be recognized by the presence of rhizomes and its flat achenes with a conspicuous tubercle.





Local Notes:



Habitat: Roadside ditches, along rivers and streams, around ponds and lakes.

Habit: Perennial herb with creeping rhizomes.

Stems: Upright, smooth, unbranched, to 2 feet tall.

Leaves: Reduced to sheaths.

Flowers: 1 per scale, with several scales per spikelet, each spikelet lanceoloid to ovoid, usually pointed at the tip, up to 1 1/2 inches long.

Sepals: 0.

Petals: 0.

Scales: Lanceolate, rounded or pointed at the tip, 1/6-1/4 inch long.

Stamens: 2 or 3.

Pistils: 1; styles 2 or 3; ovary superior.

Fruits: Achenes yellow, not triangular, obovoid, about 1/20 inch long, capped by a small conspicuous tubercle, subtended by 3-6 barbed bristles.

Notes: The achenes are eaten by waterfowl.

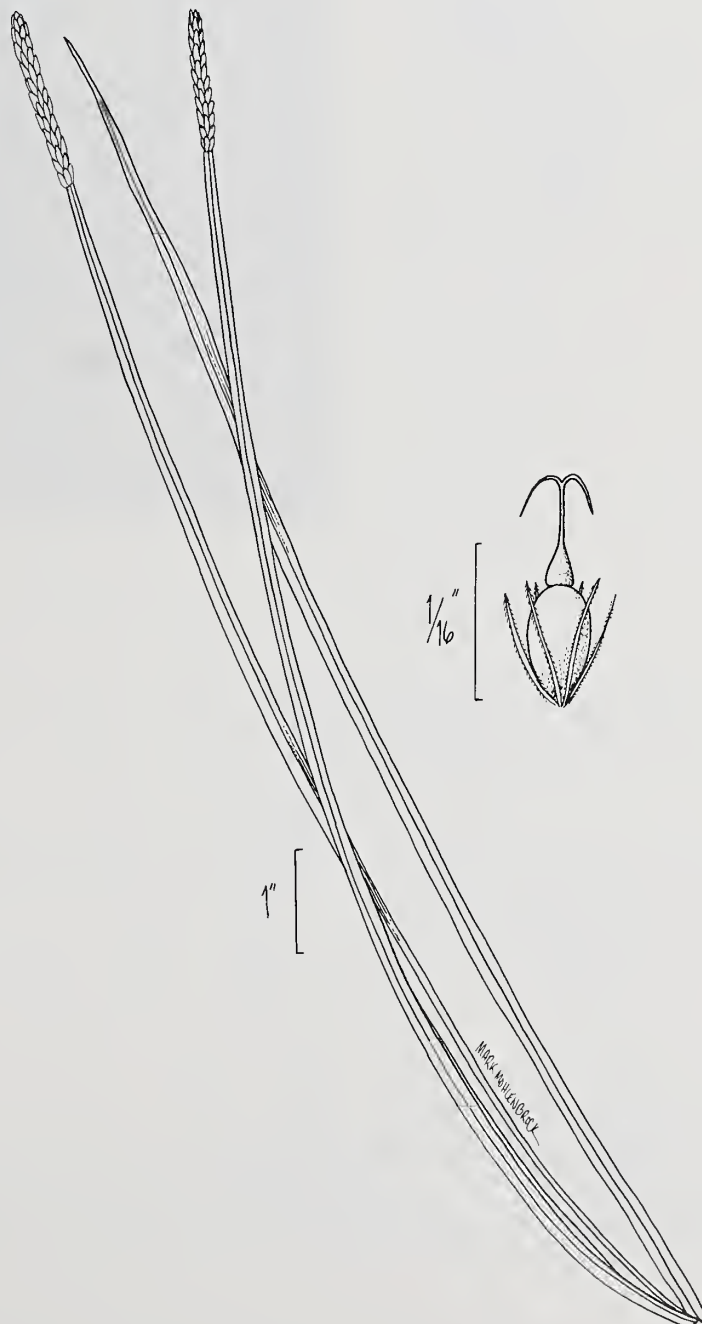
Squarestem Spikerush

Eleocharis quadrangulata (Michx.) Roem. & J. A. Schultes

Family: Sedge (Cyperaceae)

June-October

Field Marks: The square stems and the spike usually no broader than the stem are the distinguishing features.





Local Notes:



Habitat: Around ponds and lakes, along streams.

Habit: Perennial herb with stout rootstocks.

Stems: Erect, smooth, 4-sided, up to 4 feet tall.

Leaves: 0.

Flowers: Borne in a single spikelet at the tip of each stem, the spikelets not much broader than the stem, cylindrical, up to 2 inches long.

Scales: Broadly ovate, rounded or somewhat pointed at the tip.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; style 3-cleft.

Fruits: Achenes obovoid, up to 1/16 inch long, with a narrow, cone-shaped tubercle on the top.

Notes: The achenes are eaten by waterfowl. This species is listed for region 10 in the National Wetlands Inventory list, but Flora of the Pacific Northwest by Hitchcock and Cronquist (1973) does not record it for California.

Small's Spikerush
Eleocharis smallii Britton

Family: Sedge (Cyperaceae)

June-September

Field Marks: This species differs by its creeping rhizomes, its pointed spikelets, and its very slender stems.





Local Notes:



Habitat: Swamps, around lakes and ponds, wet meadows, wet prairies, roadside ditches.

Habit: Perennial herb with extensive creeping rhizomes.

Stems: Erect, very slender, smooth, up to 2 feet tall.

Leaves: 0.

Flowers: Crowded into a solitary, terminal spikelet; the spikelet lanceoloid, pointed at the tip, up to 2/3 inch long.

Scales: Broadly lanceolate, tapering to a slender tip.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior, usually 2-cleft.

Fruits: Achenes obovoid, dark brown, shiny, up to 1/12 inch long, with a spherical tubercle at the tip about half as wide as the achene.

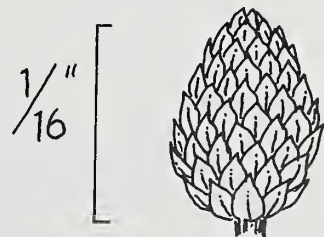
Notes: The achenes are eaten by waterfowl.

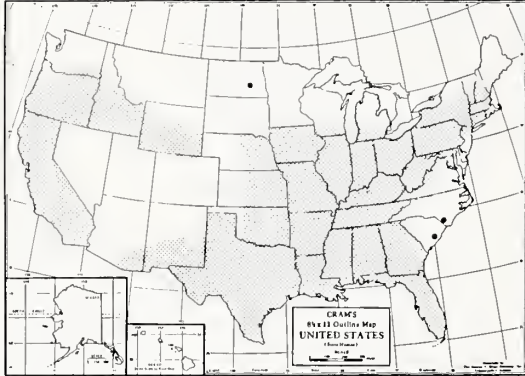
Common Hemicarpha
Hemicarpha micrantha (Vahl) Pax

Family: Sedge (Cyperaceae)

July-October

Field Marks: This is one of the tiniest sedges in the region, usually growing no more than 3 inches tall. There are usually 2-3 spikelets borne on each stem.





Local Notes:



Habitat: Sandy banks of rivers, around ponds, in sloughs.

Habit: Tiny annual herb with fibrous roots.

Stems: Slender, smooth, up to 3 inches tall, bearing spikelets a short distance from the top.

Leaves: Very narrow, near the base of the plant, smooth, much shorter than the stems.

Flowers: 1 per scale, with many scales per spikelet, with 1-4 spikelets per stem, borne near the top of the stem but with the stem extending past them; spikelets ovoid, more or less rounded at the tip; scales brown, obovate.

Sepals: 0.

Petals: 0.

Stamens: 1.

Pistils: Ovary superior; style 2-cleft.

Fruits: Achenes oblong, rounded at the tip, pale brown.

Hardstem Bulrush

Scirpus acutus Muhl.

Family: Sedge (Cyperaceae)

May-September

Field Marks: This bulrush is recognized by its nearly round stems, its cluster of spikelets borne laterally along the stem, and its usually 2-cleft style.





Local Notes:



Habitat: Along rivers.

Habit: Perennial herb with rather stout rhizomes.

Stems: Erect, not triangular, smooth, up to 8 feet tall.

Leaves: Usually reduced to sheaths near base of stem.

Flowers: Borne in spikelets from the side of the stem near the top, in short-stalked or long-stalked clusters; each spikelet oblong to cylindric, pointed or rounded at the tip, up to 3/4 inch long, reddish.

Sepals: 0.

Petals: 0.

Stamens: 2-3.

Pistils: Ovary superior; styles 2-cleft.

Fruits: Achenes flattened, obovate, not shiny.

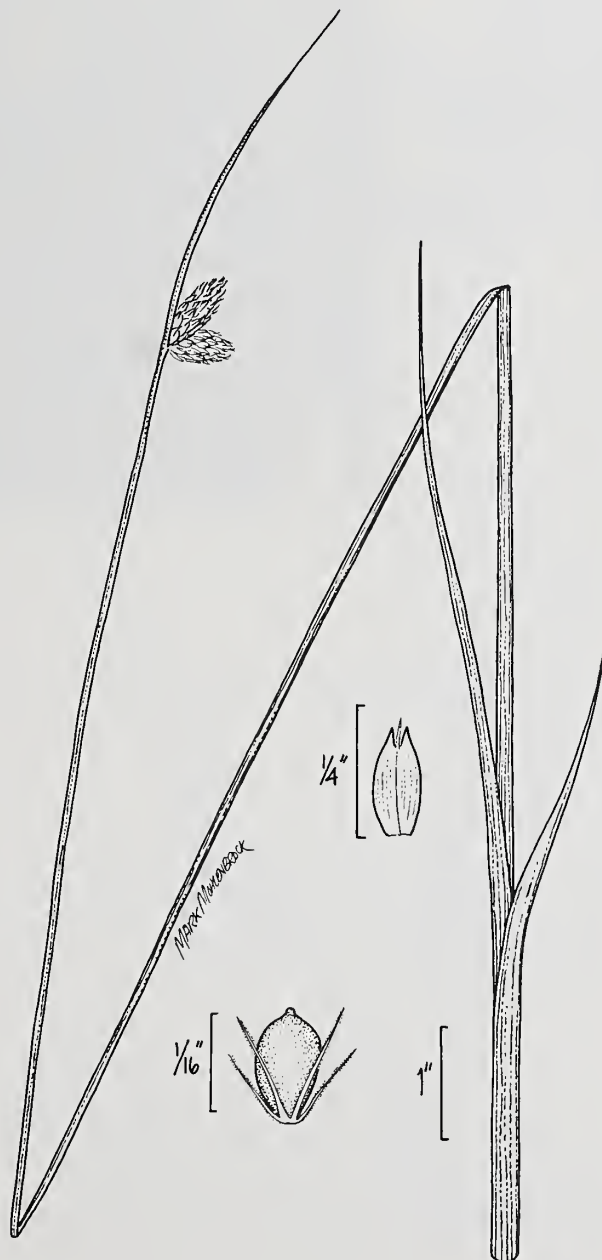
Notes: The achenes are eaten by waterfowl.

Olney's Bulrush
Scirpus americanus Pers.

Family: Sedge (Cyperaceae)

May-September

Field Marks: This bulrush has a single bract that is a continuation of the stem beyond the spikelets. The spikelets do not have stalks.





Local Notes:



Habitat: Along streams, around ponds and lakes, in sloughs, swamps, wet woods, roadside ditches.

Habit: Perennial herb with rhizomes.

Stems: Erect, triangular, smooth, up to 5 feet tall.

Leaves: Long and narrow, without teeth, smooth, up to 1/6 inch broad.

Flowers: 1 per scale, with several scales in a spikelet, the spikelets acute, up to 1 inch long, in clusters without stalks, with one bract continuing the stem beyond the spikelets; scales ovate, brown, pointed or divided into 2 teeth at tip.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: 1; styles 2; ovary superior, subtended by 2-6 barbed bristles.

Fruits: Achenes obovate, smooth, dark brown, 1/10 inch long.

Notes: This sedge is also known as Three Square or Chairmaker's Rush. The achenes are eaten by waterfowl.

Green Bulrush

Scirpus atrovirens Muhl.

Family: Sedge (Cyperaceae)

May-September

Field Marks: The flower clusters are subtended by several leaflike bracts, the stems are not sharply triangular, and the bristles in each flower are rarely longer than the achenes.





Local Notes:



Habitat: Around lakes and ponds, along streams, roadside ditches.

Habit: Perennial herb with short, thick rhizomes.

Stems: Erect, triangular, smooth, up to 4 1/2 feet tall.

Leaves: Elongated, narrow, dark green, rough along the edges, up to 1/2 inch broad.

Flowers: Borne in spikelets with several spikelets in clusters, some of the clusters sessile, others on long stalks, subtended by 2-4 leafy bracts.

Scales: Narrow, tapering to rough awns, up to 1/16 inch long, brown, green-brown, or brown-black.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior; styles 3-cleft.

Fruits: Achenes ellipsoid, triangular, pale brown, up to 1/20 inch long.

Notes: The achenes are eaten by waterfowl.

Woolgrass

Scirpus cyperinus (L.) Kunth

Family: Sedge (Cyperaceae)

July-October

Field Marks: Three or more bracts subtend the inflorescence. The spikelets are up to 1/4 inch long and become woolly at maturity because of the elongated bristles.





Local Notes:



Habitat: Swamps, sloughs, around lakes, wet woods.

Habit: Robust perennial herbs with rhizomes.

Stems: Erect, smooth, up to 5 feet tall.

Leaves: Flat, elongated, smooth, mostly crowded near base of plant, up to 1/2 inch wide.

Flowers: 1 per scale, with several scales per spikelet, the spikelets up to 1/4 inch long, forming large terminal clusters subtended by 3-6 leaf-like bracts.

Sepals: 0.

Petals: 0.

Scales: Narrowly lanceolate, pointed.

Stamens: 3.

Pistils: 1; styles 3; ovary superior, subtended by 6 bristles.

Fruits: Achenes elongated, less than 1/16 inch long, surpassed by long red-brown bristles at maturity.

Notes: The achenes are eaten by waterfowl.

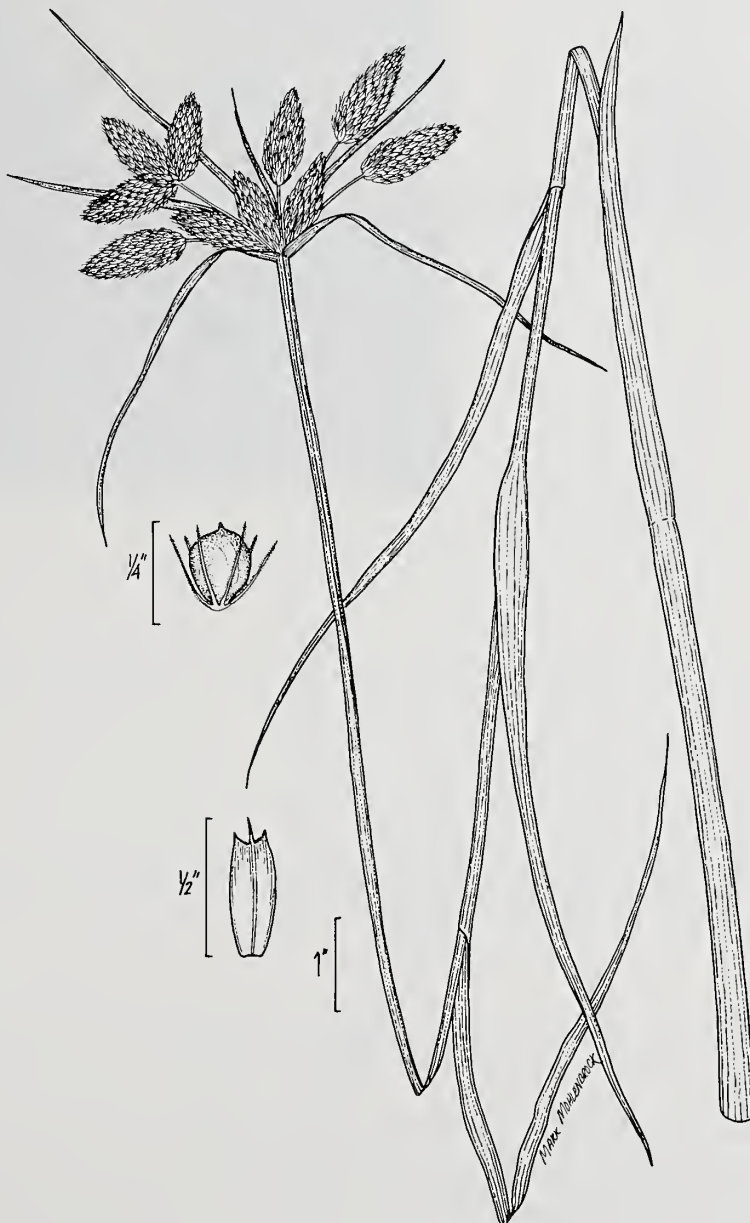
River Bulrush

Scirpus fluviatilis (Torr.) Gray

Family: Sedge (Cyperaceae)

May-September

Field Marks: Two or more bracts subtend the inflorescence. The spikelets are up to 2 inches long.





Local Notes:



Habitat: Swamps, sloughs, along rivers, around ponds and lakes, often in shallow, standing water.

Habit: Robust perennial herb with rhizomes.

Stems: Erect, triangular, smooth, up to 6 feet tall.

Leaves: Flat, elongated, smooth, up to 1 inch broad.

Flowers: 1 per scale, with several scales per spikelet, each spikelet up to 2 inches long, forming terminal clusters subtended by several leaf-like bracts.

Sepals: 0.

Petals: 0.

Scales: Elongated, usually with 2 teeth and a short awn at the tip.

Stamens: 3.

Pistils: 1; styles 3; ovary superior, subtended by 6 barbed bristles.

Fruits: Achenes triangular, whitish, about 1/8 inch long.

Notes: The achenes are eaten by waterfowl.

Reddish Bulrush
Scirpus pendulus Muhl.

Family: Sedge (Cyperaceae)

May-August

Field Marks: The spikelets are red-brown and are borne on long, drooping stalks.





Local Notes:



Habitat: Along streams, around ponds and lakes, wet prairies, wet meadows.

Habit: Perennial herb with short, thick rhizomes.

Stems: Erect, smooth, up to 4 feet tall.

Leaves: Elongated, narrow, up to 1/3 inch broad; sheath with purple speckles.

Flowers: Many borne in spikelets; the spikelets red-brown, broadly lanceoloid, up to 1/2 inch long, borne on long, drooping stalks.

Scales: Broadly lanceolate, tapering to a short point.

Sepals: 0.

Petals: 0.

Stamens: 3.

Pistils: Ovary superior.

Fruits: Achenes brown, shiny, ellipsoid, about 1/20 inch long.

Notes: In the past, this species was sometimes known as *Scirpus lineatus*. This species does not occur in the western United States as the National Wetlands Inventory indicates.

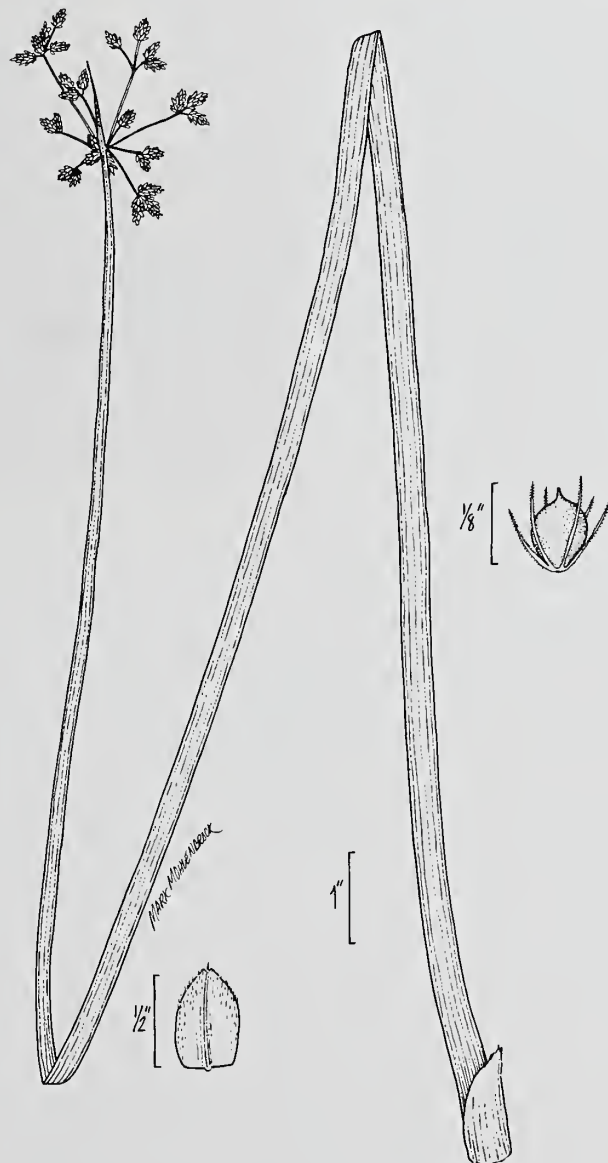
Softstem Bulrush

Scirpus validus Vahl

Family: Sedge (Cyperaceae)

May-September

Field Marks: This tall bulrush has a single bract that is a short continuation of the stem beyond the spikelets. The spikelets have distinct stalks.





Local Notes:



Habitat: Sloughs, wet prairies, around lakes and ponds, along rivers and streams.

Habit: Robust perennial herb with stout rhizomes.

Stems: Erect, not triangular, smooth, soft, up to 9 feet tall.

Flowers: 1 per scale, with several scales per spikelet, each spikelet up to 1/2 inch long, forming a cluster near the top of the stem, with one bract that is a short continuation of the stem beyond the spikelets.

Sepals: 0.

Petals: 0.

Scales: Ovate, round-tipped but with a short point, somewhat hairy, up to 1/2 inch long.

Stamens: 3.

Pistils: 1; styles 2; ovary superior, subtended by 4-6 barbed bristles.

Fruits: Achenes brown, about as broad as long, 1/10-1/8 inch long.

Notes: The achenes are eaten by waterfowl.

GROUP 4

Other Monocots

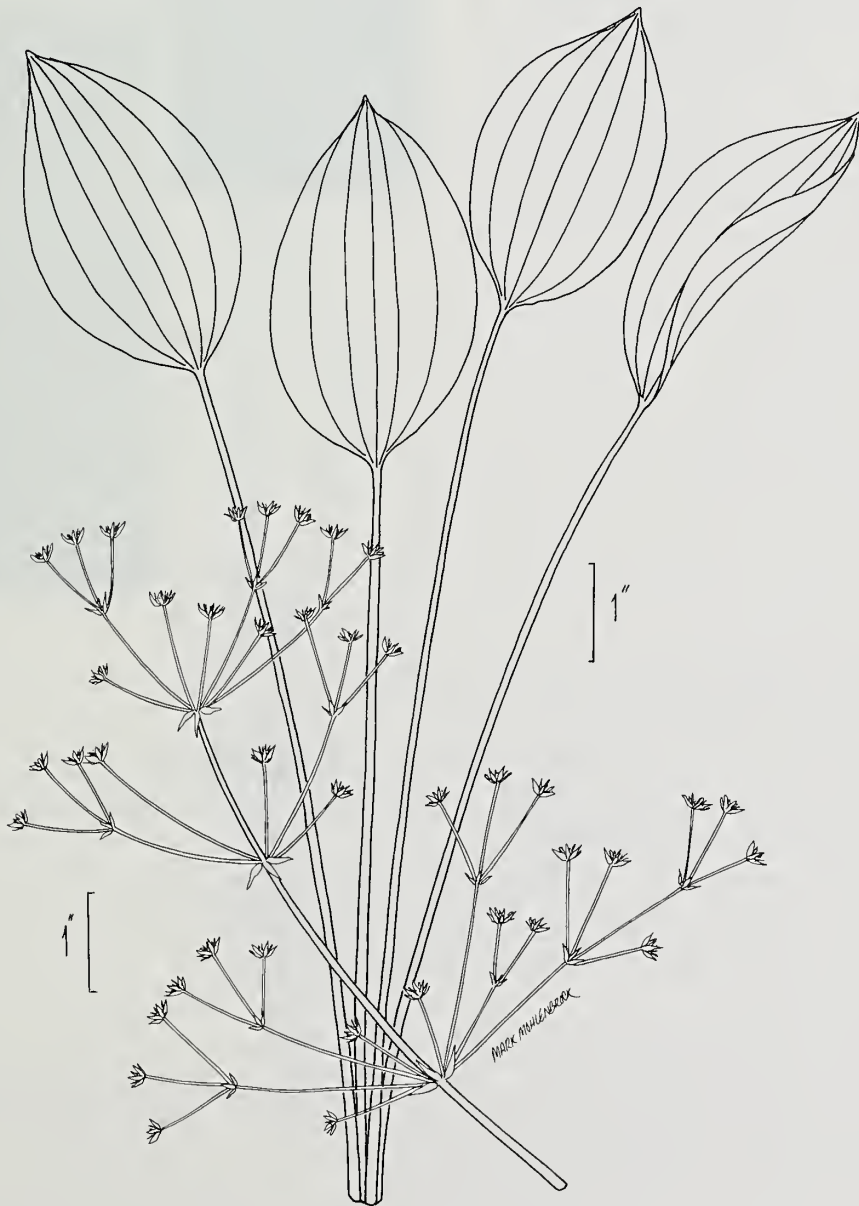
Common Waterplantain

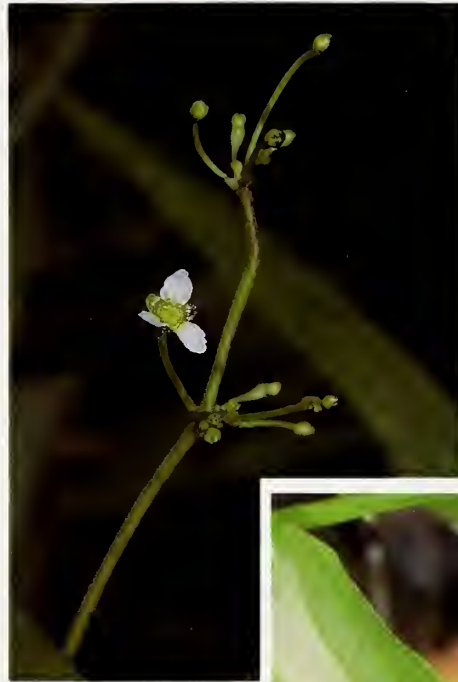
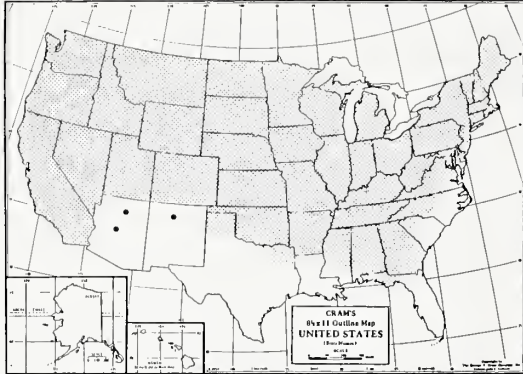
Alisma plantago-aquatica L.

Family: Waterplantain (Alismaceae)

May-September

Field Marks: This species is distinguished by its large, plantain-like leaves in a basal rosette and by its small white flowers in clusters on a stout flowering stem.





Local Notes:

Habitat: Along streams, around ponds, marshes.

Habit: Perennial herb with thickened roots.

Stems: Erect, smooth, up to 3 feet tall, bearing only whorls of flowers.

Leaves: All basal, elliptic to ovate, pointed at the tip, rounded or sometimes heart-shaped at the base, smooth, up to 8 inches long.

Flowers: Borne in whorls on the stem, white, up to 1/6 inch across.

Sepals: 3, green, ovate, rounded at the tip, up to 1/8 inch long.

Petals: 3, white, free from each other, up to 1/12 inch long.

Stamens: 6-9.

Pistils: Several in a ring, the ovaries superior.

Fruits: Achenes borne in circular heads up to 1/6 inch in diameter; each achene obovate, about 1/8 inch long, with a minute beak.

Notes: The achenes are eaten by waterfowl.

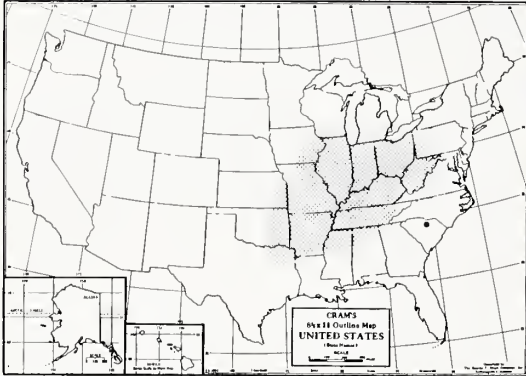
Atlantic Camass
Camassia scilloides (Raf.) Cory

Family: Lily (Liliaceae)

April-May

Field Marks: The distinguishing features of this species are the long, narrow leaves that are all basal and the raceme of pale blue flowers with the six petal-like parts barely united at the base.





Local Notes:



Habitat: Wet woods, along streams, damp prairies.

Habit: Perennial herbs with a bulb.

Stems: Leafless, except for 1 or 2 reduced leaves near the cluster of flowers at the tip of the stem, smooth.

Leaves: All basal, long and narrow, smooth, without teeth, up to 2 feet long, up to 3/4 inch wide.

Flowers: Several in a terminal raceme up to 10 inches long, each flower up to 3/4 inch across.

Sepals and Petals: 6, undifferentiated, pale blue, united at the base, each segment up to 3/4 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Capsules triangular to nearly spherical, smooth, 3-parted, up to 1/2 inch long, sometimes about as broad.

Notes: The bulbs of this species are said to be edible.

Common Dayflower

Commelina communis L.

Family: Dayflower (Commelinaceae)

May-October

Field Marks: This is the only annual dayflower with fibrous roots that has 2 blue petals and 1 smaller white petal.





Local Notes:



Habitat: Wet soil in old fields, thickets, and bottomland woods.

Habit: Erect or creeping annual with fibrous roots, often rooting at the nodes.

Stems: Erect or creeping, smooth, branched, to 1 1/2 feet long.

Leaves: Alternate, simple, lanceolate to lance-ovate, pointed at the tip, more or less rounded at the base, without teeth, smooth, to 5 inches long, to 1 inch broad, with a conspicuous sheath.

Flowers: Few in a boat-shaped spathe, the spathe about 1 inch long, with free edges, the flowers asymmetrical and blooming only for a single morning.

Sepals: 3, but 2 of them partly united, green or bluish, unequal in size (1 of them concealed in the drawing by the spathe).

Petals: 3, free from each other, 2 of them blue, 1/2-1/3 inch long, the third one white and much smaller (smaller petal not drawn so that pistil may be seen).

Stamens: 6, 3 of them not fertile and bright yellow.

Pistils: 1; style 1; ovary superior.

Fruits: Capsule smooth, 1/3 inch long, with 4 dark brown, roughened seeds about 1/6 inch long.

Notes: This native of Asia has now spread into disturbed wetland habitats.

Spreading Dayflower
Commelina diffusa N. L. Burm.

Family: Spiderwort (Commelinaceae)

July-October

Field Marks: This dayflower has creeping stems, all 3 petals blue, and 5 anthers.





Local Notes:



Habitat: Wet ground, sometimes in fields.

Habit: Creeping annual, rooting at the nodes, with fibrous roots.

Stems: Creeping, smooth, up to 2 feet long.

Leaves: Alternate, simple, lanceolate to ovate-lanceolate, pointed at the tip, rounded or tapering to the base, without teeth, smooth, up to 3 inches long, up to 2/3 inch broad.

Flowers: 1-3 together, arising from a leaf-like, folded spathe that is not united, blue.

Sepals: 3, green, unequal in size.

Petals: 3, all blue, 2 of them larger than the third one.

Stamens: 5.

Pistils: Ovary superior, smooth.

Fruits: Capsule containing 5 seeds; seeds oblong, black, veiny, 1/10 inch long.

Virginia Dayflower

Commelina virginica L.

Family: Dayflower (Commelinaceae)

July-October

Field Marks: Virginia dayflower is the only perennial member of this genus with all 3 petals blue and with rhizomes.





Local Notes:



Habitat: Swamps, sloughs, wet woods.

Habit: Perennial herbs with rhizomes.

Stems: Erect or seldom lying on the ground, usually hairy, to 2 1/2 feet long.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, without teeth, tough to the touch on the upper surface, up to 5 inches long, up to 2 inches broad, with a conspicuous sheath.

Flowers: Few in a boat-shaped spathe, the spathe about 1 inch long, with united edges, the flowers nearly symmetrical, about 1 inch across.

Sepals: 3, but 2 of them partly united, green or bluish, unequal in size.

Petals: 3, free from each other, all blue and nearly all the same size, about 1/2 inch long.

Stamens: 6, 3 of them not fertile and bright yellow.

Pistils: 1; style 1; ovary superior.

Fruits: Capsule about 1/2 inch long, with 3 smooth or slightly roughened seeds about 1/4 inch long.

Notes: The somewhat fleshy leaves of this species are eaten by wildlife.

Northern Spiderlily

Hymenocallis occidentalis (Leconte) Kunth

Family: Lily (Liliaceae)

July-September

Field Marks: This species is distinguished by its large, strap-shaped, toothless basal leaves and its large, white flowers with 6 petal-like structures and a white membranaceous "cup" between the petals and the stamens.





Local Notes:



Habitat: Swamps, wet woods.

Habit: Perennial herb with bulbs.

Stems: Bearing flowers only, smooth, as long as or longer than the leaves, up to 3 feet long.

Leaves: Basal, strap-shaped, pointed at the tip, tapering to the base, without teeth, smooth, somewhat fleshy, up to 2 feet long, up to 2 inches broad.

Flowers: Solitary or few in a terminal umbel, white, up to 6 inches across.

Sepals and Petals: Similar, 6, white, spreading or curved downward, long and narrow, up to 3 inches long, united below to form a slender tube up to 5 inches long.

Stamens: 6, attached to the top of the perianth tube, the filaments connected at their base by a membranaceous, white "cup."

Pistils: Ovary inferior; style 1.

Fruits: Capsules ovoid to spherical, fleshy, up to 3/4 inch in diameter.

Common Goldstargrass

Hypoxis hirsuta (L.) Coville

Family: Lily (Liliaceae)

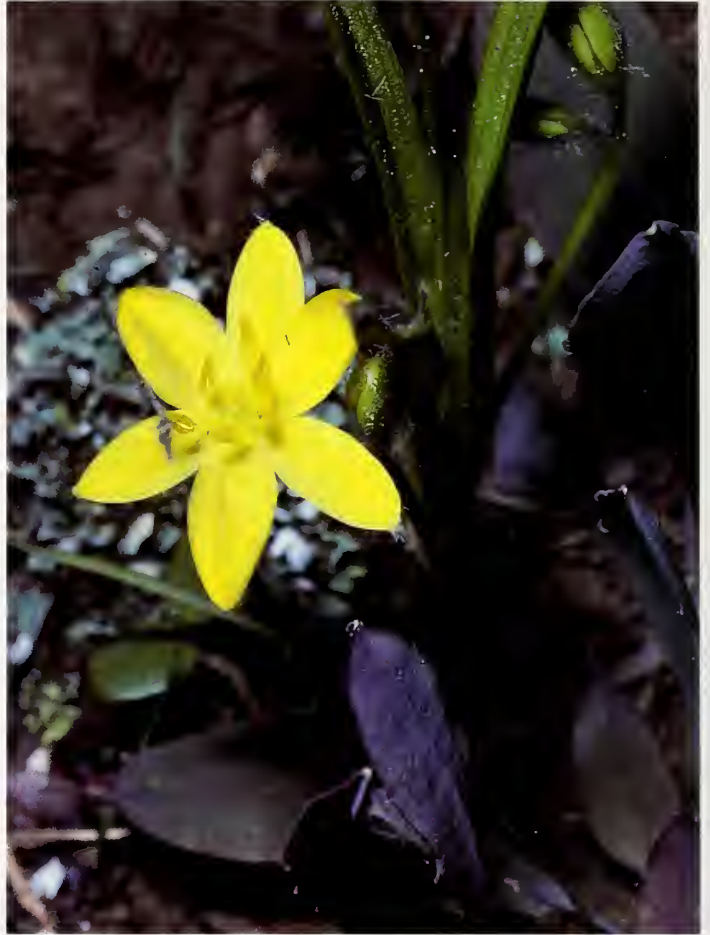
April-June

Field Marks: This species is readily distinguished by its hairy, grass-like leaves and its bright yellow, 6-parted flowers.





Local Notes:



Habitat: Wet meadows, but usually in drier habitats.

Habit: Perennial herb with an underground corm.

Stems: Absent except for the flowering stalk, hairy, up to 8 inches tall.

Leaves: Tufted at the base of the plant, linear, pointed at the tip, tapering to the base, without teeth, hairy, up to 1/3 inch broad.

Flowers: 3 or more on a leafless stalk, bright yellow, up to 1 1/4 inches across.

Sepals and Petals: 6, united only at base, not distinguishable into sepals and petals, bright yellow, up to 1/3 inch long.

Stamens: 6, shorter than the sepals and petals.

Pistils: 1; ovary inferior.

Fruits: Capsules narrowly ellipsoid, hairy, dark brown to black, 1/4-1/3 inch long; seeds numerous, black, shiny, covered with minute warts, 1/10 inch long.

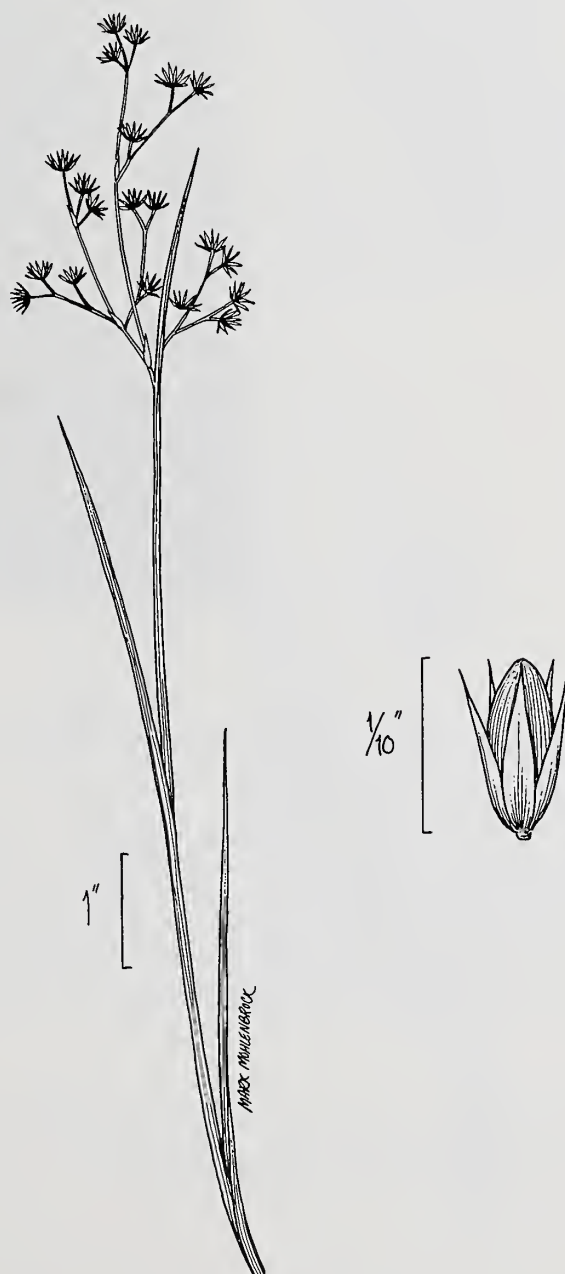
Tapertip Rush

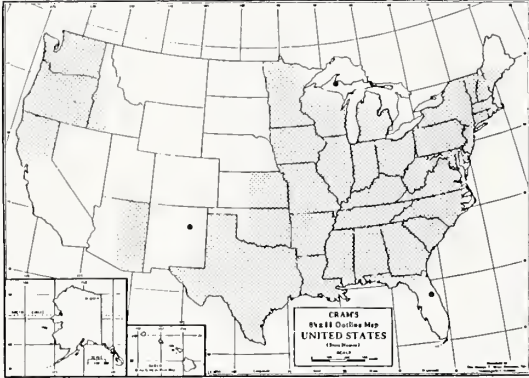
Juncus acuminatus Michx.

Family: Rush (Juncaceae)

May-August

Field Marks: This rush, with hollow, cylindrical leaves, has flower heads each with 8 or more flowers and capsules about as long as the pointed sepals and petals.





Local Notes:



Habitat: Wet meadows, around ponds, along streams, wet prairies, roadside ditches.

Habit: Perennial herb with short rootstocks.

Stems: Erect, smooth, up to 3 feet tall, bearing 1-3 leaves.

Leaves: Elongated, cylindrical, hollow, bearing conspicuous cross partitions, up to 8 inches long.

Flowers: Several in hemispherical heads, with several heads in a branched cluster.

Sepals: 3, green, lanceolate, pointed at the tip, shorter than or about as long as the capsule.

Petals: 3, green, lanceolate, pointed at the tip, shorter than or about as long as the capsule.

Stamens: 3.

Pistils: Ovary superior.

Fruits: Capsule narrowly ovoid, pale brown, up to 1/8 inch long.

Notes: Some flowering heads also bear leafy outgrowths.

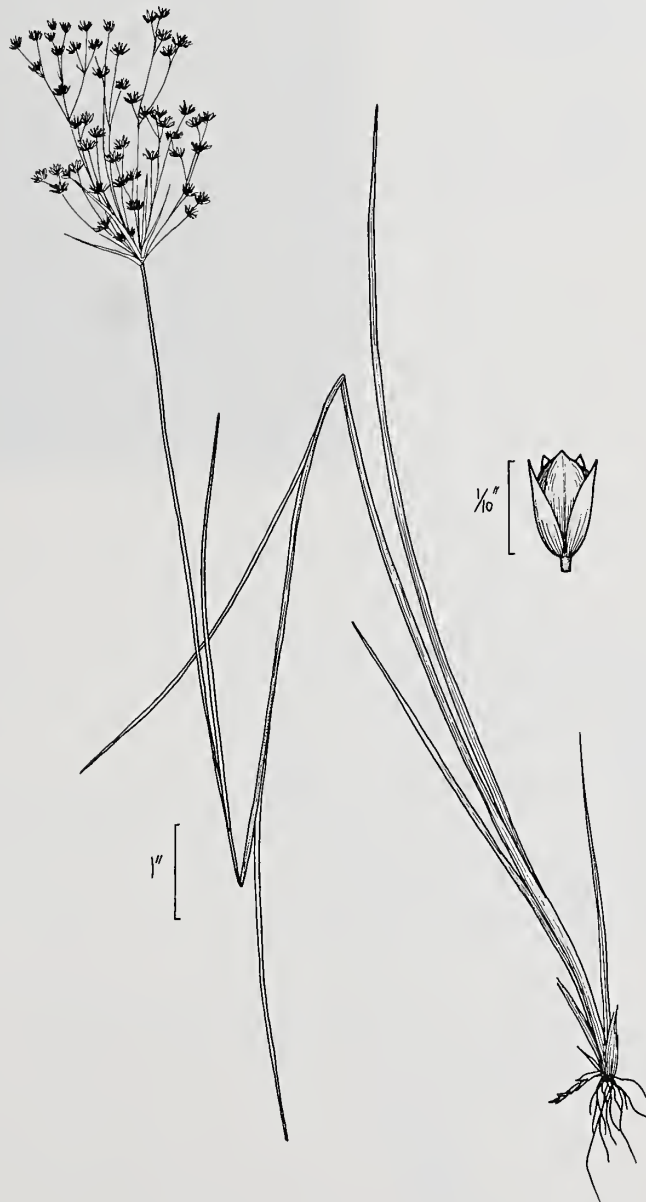
Twinflower Rush

Juncus biflorus Elliott

Family: Rush (Juncaceae)

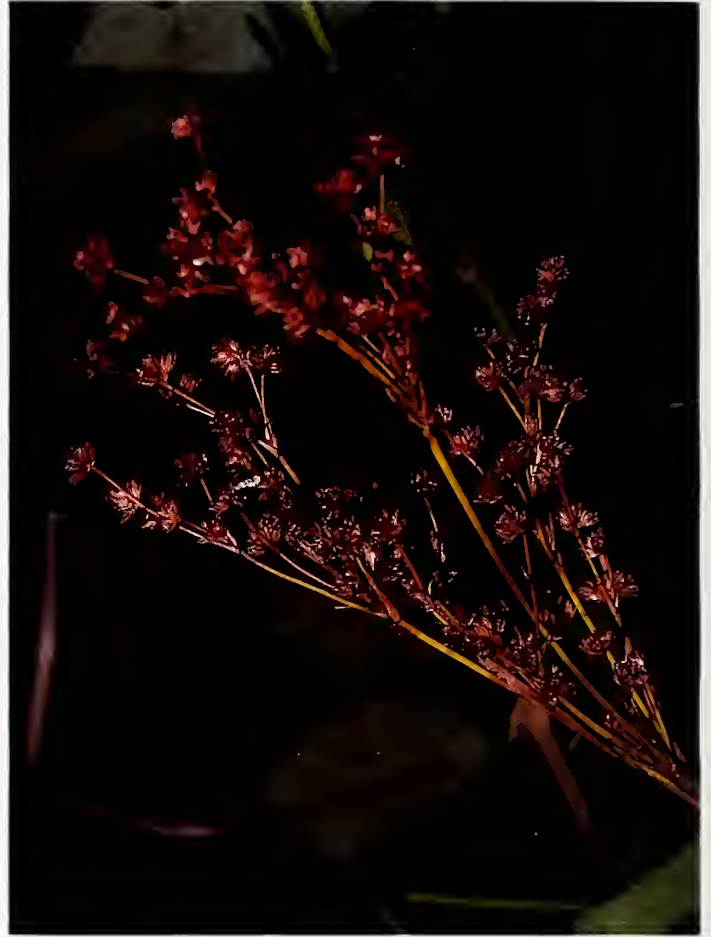
May-September

Field Marks: This rush differs from others by its red-brown flowers and capsules arranged 2-12 in a group.





Local Notes:



Habitat: Wet meadows, wet prairies, roadside ditches.

Habit: Tufted perennial herb with short rhizomes.

Stems: Erect, smooth, up to 3 1/2 feet tall.

Leaves: Long, narrow, flat, smooth, up to 1/4 inch broad.

Flowers: 2-12 in small clusters, with many clusters in an open, branched inflorescence.

Sepals: 3, narrow, pointed, about 1/10 inch long.

Petals: 3, narrow, pointed, slightly longer than the sepals.

Stamens: 3.

Pistils: Ovary superior.

Fruits: Capsules obovoid, red-brown, smooth, shiny, about 1/10 inch long.

Notes: The fruits are eaten by waterfowl.

Short-fruited Rush
Juncus brachycarpus Engelm.

Juncus brachycarpus Engelm.

Family: Rush (Juncaceae)

May-September

Field Marks: This rush differs from all other rushes by its cylindrical leaves, rounded flower heads, and capsules much shorter than the sepals and petals.





Local Notes:



Habitat: Wet prairies, wet meadows, roadside ditches.

Habit: Perennial herb with thickened rootstocks.

Stems: Erect, smooth, up to 3 feet tall.

Leaves: Elongate, cylindrical, with conspicuous cross-markings, smooth, up to 6 inches long.

Flowers: Borne in 1-20 spherical heads; each head up to 1/2 inch in diameter.

Sepals: 3, green, very slender and pointed at the tip.

Petals: 3, green, very slender and pointed at the tip.

Stamens: 3.

Pistils: Ovary superior.

Fruits: Capsules oblongoid, much shorter than the sepals and petals; seeds with a network pattern.

Notes: The seeds are eaten by waterfowl.

Soft Rush

Juncus effusus Fern. & Wieg.

Family: Rush (Juncaceae)

May-September

Field Marks: This is the only *Juncus* with the flowers appearing lateral on the stem and no leaves.





Local Notes:



Habitat: Wet ground, in ditches, swamps, marshes, around ponds and lakes.

Habit: Tufted perennial herbs with rhizomes.

Stems: Erect, hollow, smooth, up to 4 1/2 feet tall.

Leaves: None.

Flowers: Several in a cluster, arising from the stem a few inches below the top, each flower green or brown, about 1/6 inch long.

Sepals: 3, free from each other, narrow, tapering to a point.

Petals: 3, free from each other, narrow, tapering to a point.

Stamens: 3.

Pistils: Ovary superior.

Fruits: Capsules obovoid, brown, smooth, about 1/6 inch long; seeds numerous, straw-colored, 1/40 inch long.

Notes: Muskrats sometimes eat the stems of this rush; the seeds are eaten by waterfowl.

Inland Rush

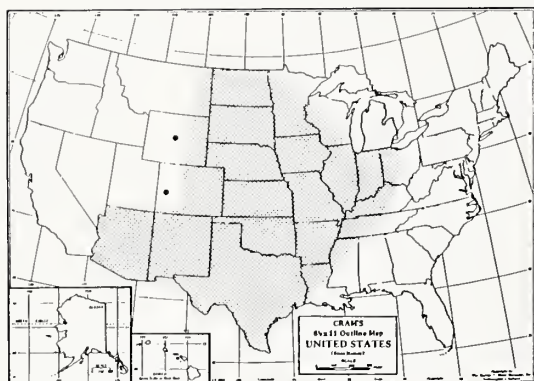
Juncus interior Wiegand

Family: Rush (Juncaceae)

May-August

Field Marks: Inland rush has flat leaves and leaf sheaths with short, rounded auricles. The achenes are usually pale brown.





Local Notes:



Habitat: Wet prairies, wet meadows, fallow fields; also in drier habitats.

Habit: Perennial herb with tufted roots.

Stems: Erect, smooth, up to 3 feet tall.

Leaves: Elongated, very narrow, flat, all near the base of the plant, smooth.

Flowers: Several, scattered, borne along ascending branchlets and not overlapping.

Sepals: 3, green, very narrowly lanceolate, tapering to a long point, about 1/6 inch long.

Petals: 3, green, very narrowly lanceolate, tapering to a long point, about 1/6 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Capsules oblongoid, rounded at the tip, about as long as the sepals and petals.

Notes: The seeds are eaten by waterfowl.

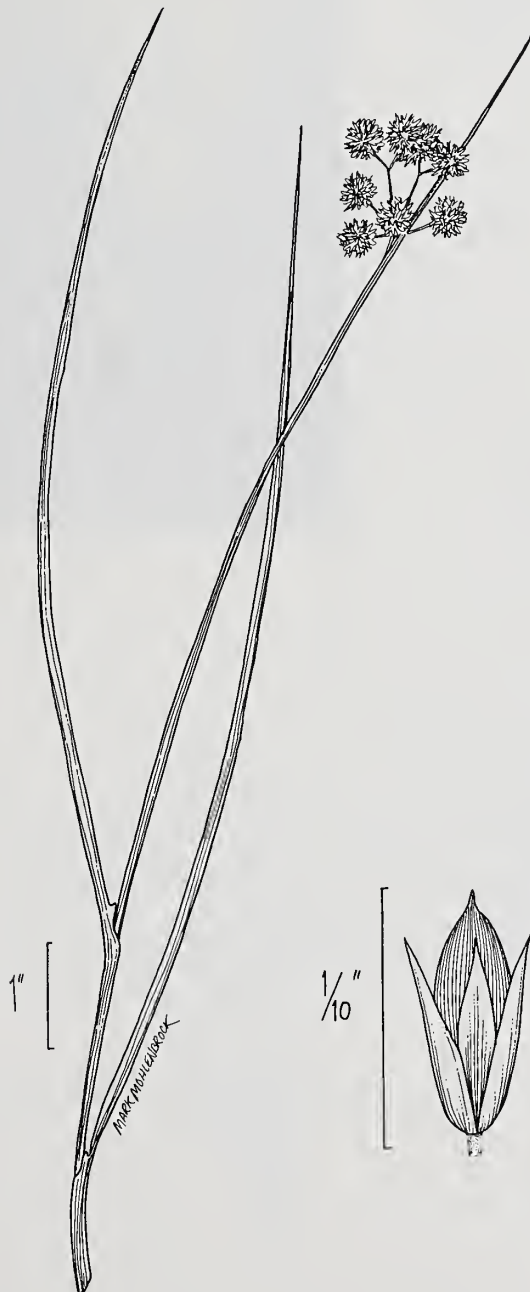
Jointed Rush

Juncus nodosus L.

Family: Rush (Juncaceae)

July-August

Field Marks: Jointed rush has terete, hollow leaves and flowers borne in spherical heads up to 1/4 inch in diameter with the sepals about as long as the petals.





Local Notes:



Habitat: Sandy banks of rivers and streams.

Habit: Perennial herb with rhizomes.

Stems: Erect, smooth, unbranched, up to 2 feet tall.

Leaves: Elongated, terete, hollow, the uppermost leaves overtopping the clusters of flowers.

Flowers: Borne in spherical heads up to 1/4 inch in diameter, with up to 30 heads per stem.

Sepals: 3, greenish brown, tapering to a slender point, up to 1/10 inch long.

Petals: 3, greenish brown, tapering to a slender point, up to 1/10 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Capsules lanceoloid, tapering to a narrow point, longer than the sepals and petals.

Slender Rush

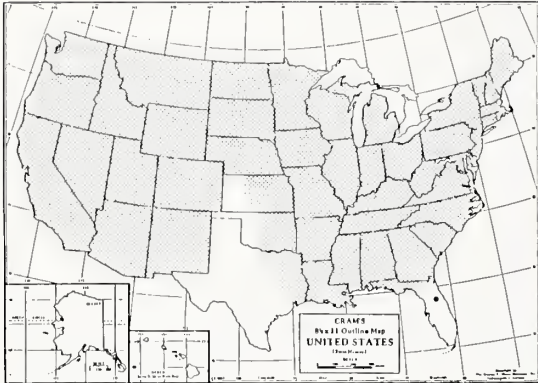
Juncus tenuis Willd.

Family: Rush (Juncaceae)

May-September

Field Marks: This rush has slender, flat leaves and leaf sheaths with white, transparent teeth.





Local Notes:



Habitat: Wet ground, along streams, in pathways.

Habit: Tufted perennial herbs.

Stems: Erect, wiry, smooth, slender, up to 1 1/2 feet tall.

Leaves: Elongated, narrow, flat, shorter than the flowering stem, up to 1/12 inch broad; the sheath of the leaf with white, transparent teeth.

Flowers: Several on branches of unequal length, all subtended by at least the lowest bract.

Sepals: 3, green or green-brown, narrowly lanceolate, up to 1/6 inch long.

Petals: 3, green or green-brown, narrowly lanceolate, up to 1/6 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Capsules oblongoid to obovoid, rounded at the tip, shorter than the sepals and petals; seeds minute.

Notes: This species is usually called path rush.

Torrey Rush

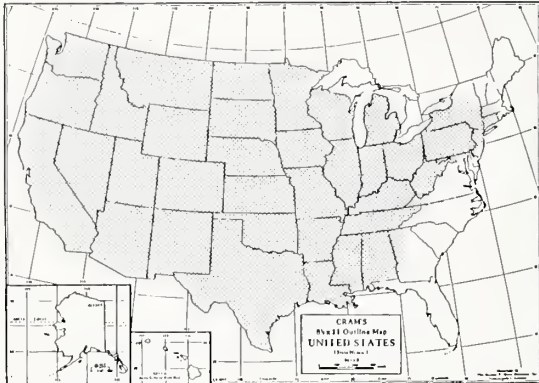
Juncus torreyi Coville

Family: Rush (Juncaceae)

July-October

Field Marks: Torrey rush, with spherical heads up to 1/2 inch in diameter, has the largest heads of any rush.





Local Notes:



Habitat: Sandy or muddy banks of rivers and streams, around ponds and lakes, wet prairies, wet meadows, roadside ditches.

Habit: Perennial herb with rhizomes.

Stems: Erect, smooth, unbranched, up to 3 feet tall.

Leaves: Elongated, terete, hollow.

Flowers: Borne in spherical heads up to 1/2 inch in diameter, with up to 20 heads per stem.

Sepals: 3, greenish brown, tapering to a slender point, up to 1/8 inch long.

Petals: 3, greenish brown, tapering to a slender point, up to 1/8 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Capsules narrowly lanceoloid, tapering to a point, as long as or longer than the sepals and petals.

Nodding Ladies' Tresses

Spiranthes cernua (L.) L. C. Rich.

Family: Orchid (Orchidaceae)

August-November

Field Marks: Species of *Spiranthes* usually have their flowers in twisted spikes. This species has flowers at least 1/3 inch long borne in spikes at least 3/4 inch thick.





Local Notes:



Habitat: Wet meadows; also in drier habitats.

Habit: Perennial herb with tuberous roots.

Stems: Erect, unbranched, hairy at least above, up to 1 1/2 feet tall.

Leaves: Mostly basal, simple, narrowly lanceolate, pointed at the tip, tapering to a sheathing base, up to 10 inches long, up to nearly 1 inch broad, more or less hairy.

Flowers: Several in 3 spirally twisted rows, forming a cylindrical, densely flowered spike up to 6 inches long; each flower usually nodding.

Sepals: 3, white, linear to narrowly lanceolate, hairy, up to 1/2 inch long.

Petals: 3, white, linear to narrowly lanceolate, hairy, up to 1/2 inch long; the lip petal narrowly ovate.

Stamens: 1.

Pistils: Ovary inferior.

Fruits: Capsules ellipsoid.

Skunk Cabbage

Symplocarpus foetidus (L.) Salisb.

Family: Aroid (Araceae)

February-April

Field Marks: This species is distinguished by its large heart-shaped leaves and its very foul-smelling flowers which bloom as early as February.





Local Notes:



Habitat: Swamps, bogs.

Habit: Perennial herb with thick rootstocks.

Stems: Partly underground, leafless, smooth.

Leaves: Basal, simple, ovate, more or less pointed at the tip, heart-shaped at the base, smooth, without teeth, up to 3 feet long and up to 1 foot broad; leaf stalks with deep grooves.

Flowers: Male and female flowers borne separately on a thickened stalk (spadix) surrounded by a leaf-like spathe; the spathes up to 6 inches long, purple-brown to greenish yellow.

Sepals: 4, small.

Petals: Absent.

Stamens: 4 or more.

Pistils: Embedded in the spadix; style 4-sided.

Fruits: Berries with seeds up to 1/2 inch long.

Notes: This is one of the first herbs to flower.

GROUP 5

Trees or Shrubs

Hazel Alder

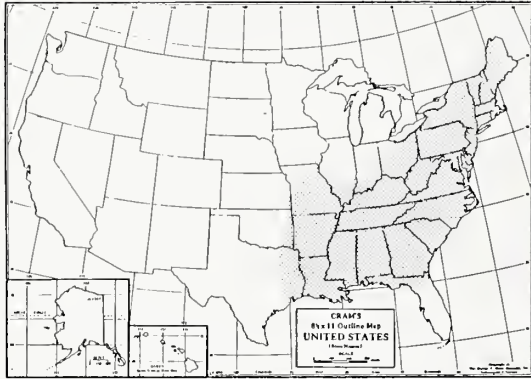
Alnus serrulata (Ait.) Willd.

Family: Birch (Betulaceae)

March-April

Field Marks: This alder has woody “cones” up to 1 inch long and wingless seeds.





Local Notes:

Habitat: Along streams, wet meadows.

Habit: Shrub with several stems.

Stems: Dark gray to black, up to 15 feet tall; the twigs usually rusty-hairy early in the season.

Leaves: Alternate, simple, ovate to obovate, pointed or rounded at the tip, rounded or nearly heart-shaped at the base, sharply toothed, hairy on the veins on the lower surface of the leaves.

Flowers: Male and female flowers borne separately but on the same plant, appearing before the leaves unfold; the male in slender, drooping spikes up to 3 inches long; the female in erect, oblong "cones" less than 1 inch long.

Sepals: 4, minute, present only in the male flowers.

Petals: 0.

Stamens: 4.

Pistils: Styles 2.

Fruits: Woody, cone-like, up to 1 inch long, containing several nut-like seeds; the seeds shiny, obovoid, up to 1/8 inch long, wingless.

Dull-leaf Indigo
Amorpha fruticosa L.

Family: Pea (Fabaceae)

April-June

Field Marks: This shrub is distinguished by its leaves with 11-27 leaflets, its dense spikes of small, deep purple flowers, and its curved, glandular pods about 1/3 inch long.





Local Notes:



Habitat: Along rivers and streams, wet woods, around ponds.

Habit: Shrub.

Stems: Erect, much branched, smooth or somewhat hairy, up to 12 feet tall.

Leaves: Alternate, pinnately divided into 11-27 leaflets, the leaflets oblong to elliptic, rounded at the tip except for a short mucro, rounded or tapering to the base, smooth or hairy, without teeth, up to 2 inches long.

Flowers: Many crowded into erect racemes up to 8 inches long, dark purple.

Sepals: 5, unequal in size, green, united to form a short, usually hairy cup.

Petals: 1, purple, about 1/4 inch long.

Stamens: 10, protruding above the petals.

Pistils: Ovary superior.

Fruits: Pods about 1/3 inch long, curved, smooth, glandular-dotted, containing 1-2 seeds.

Notes: This species exhibits considerable variation in leaflet shape and hairiness throughout its range.

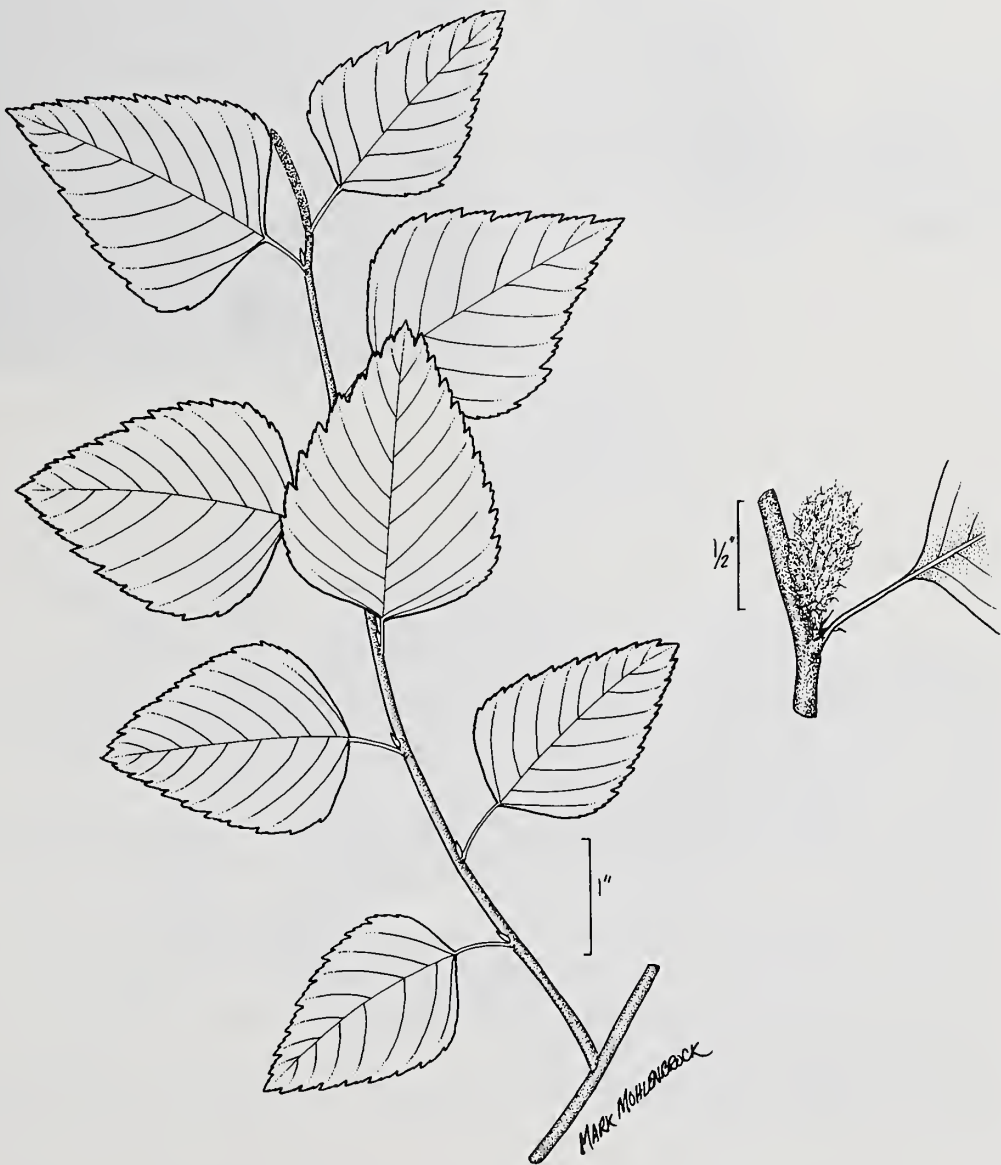
River Birch

Betula nigra L.

Family: Birch (Betulaceae)

April-May

Field Marks: The river birch is distinguished by its bark that curls and shreds into papery sections revealing a pinkish brown underbark.





Local Notes:



Habitat: Along rivers and streams; bottomland woods.

Habit: Trees up to 75 feet tall, with a trunk diameter up to 2 feet; crown irregularly rounded.

Bark: Curling and shredding into papery shreds, revealing a pinkish brown underbark.

Buds: Up to 1/4 inch long, pointed hairy.

Leaves: Alternate, simple, broadly triangular to ovate, coarsely doubly toothed, pointed at the tip, more or less cut straight across the base, paler and densely hairy on the lower surface, up to 3 inches long.

Flower: Male and female flowers borne separately but on the same tree, the male in slender drooping clusters, the female in short, conelike, woolly clusters.

Fruits: Tiny, hairy nutlets, each with a 3-lobed wing, crowded together in a cylindrical cone up to 1 1/2 inches long and up to 1/2 inch thick.

Notes: This species is often planted as an ornamental. The wood is used in making furniture. The leaves turn yellow in autumn.

Low Birch

Betula pumila L.

Family: Birch (Betulaceae)

May

Field Marks: This is the only shrubby birch in the midwest. Its bark does not peel or shred.





Local Notes:



Habitat: Bogs.

Habit: Shrub to 9 feet tall, with slender brown twigs.

Buds: Up to 1/4 inch long, pointed, more or less hairy.

Leaves: Alternate, simple, obovate to ovate to orbicular, rounded or pointed at the tip, rounded or tapering at the base, coarsely toothed, usually smooth on the upper surface, paler and smooth or hairy on the lower surface, up to 1 1/2 inches long, up to 1 inch wide; leaf-stalks about 1/4 inch long, smooth or hairy.

Flowers: Male and female flowers borne separately, but on the same plant, the male in drooping clusters, the female in erect clusters up to 1 inch long.

Fruits: Tiny nutlets with broad wings, each subtended by a 3-lobed bract, crowded together into a cylindrical cone up to 1 1/2 inches long and up to 1/2 broad.

American Hornbeam

Carpinus caroliniana Walter

Family: Hazelnut (Corylaceae)

April-May

Field Marks: The smooth bark with vertical “muscular” ridges distinguishes this species. Each seed is attached to a smooth, 3-lobed bract.





Local Notes:



Habitat: Along streams, low woods, rich mesic woods.

Habit: Tree up to 30 feet tall, with a rounded crown.

Bark: Smooth, blue-gray, ridged, appearing “muscular.”

Leaves: Alternate, simple, broadly lanceolate, pointed at the tip, usually rounded at the base, up to 4 inches long, about half as wide, finely doubly toothed, the upper surface smooth, the lower surface smooth or hairy.

Flowers: Male and female flowers on same tree but in different spikes.

Sepals: 0.

Petals: 0.

Stamens: 3-12.

Pistils: Subtended by a bract, with 2 stigmas.

Fruits: Nutlets borne at the base of a 3-lobed green bract, crowded together into a fruiting cluster.

Notes: Other common names for this tree are ironwood, blue beech, and musclewood. Although the National Wetlands Inventory lists this species from area 5, no tree manual nor the Atlas of the Flora of the Great Plains by McGregor, *et al.* (1981) report it for there.

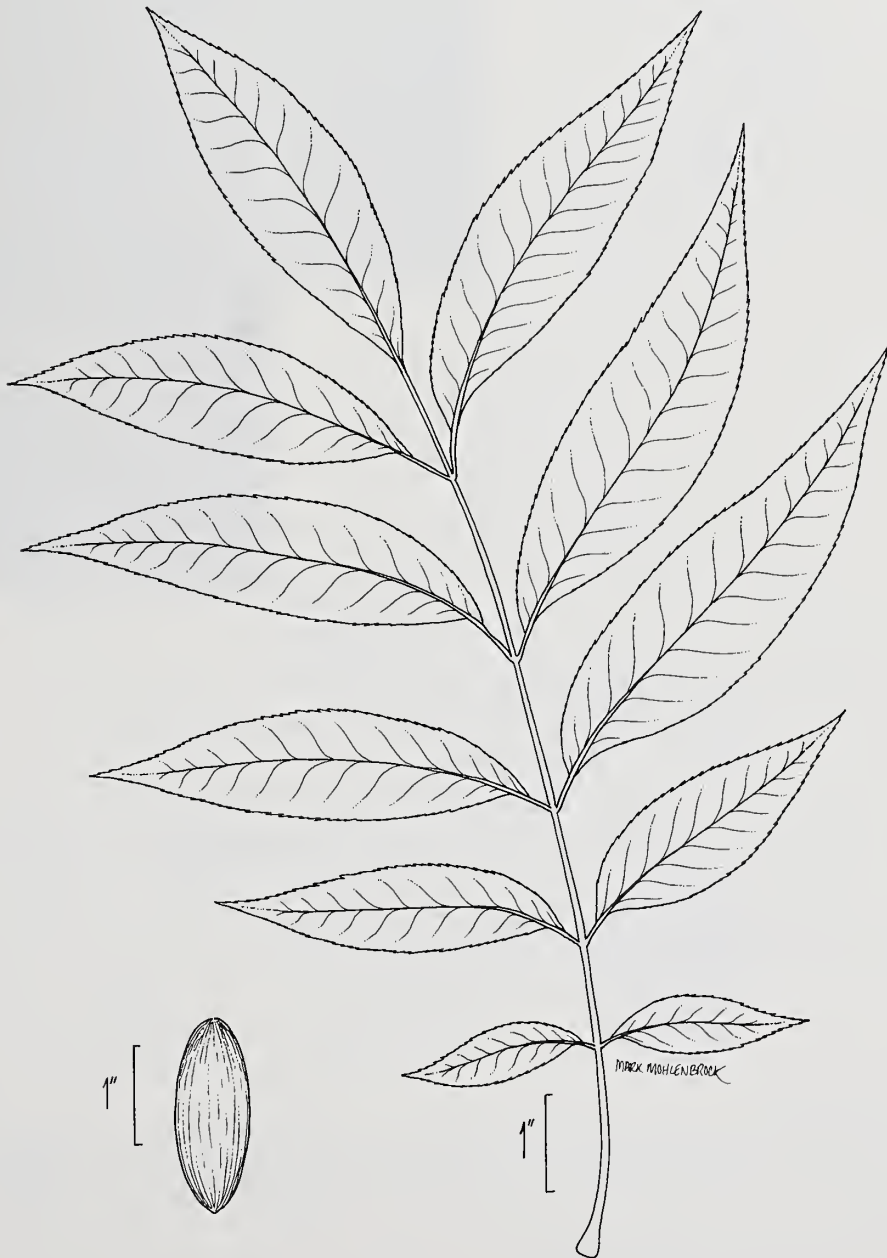
Common Pecan

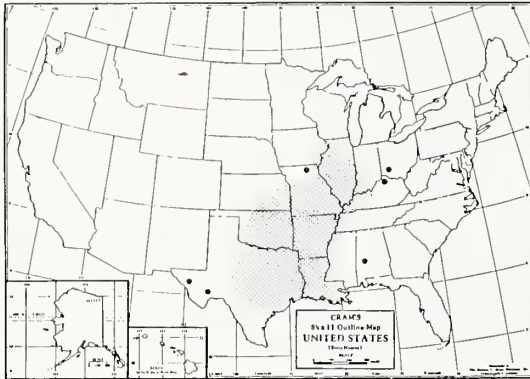
Carya illinoensis (Wangenh.) K. Koch

Family: Walnut (Juglandaceae)

April-May

Field Marks: Pecan is distinguished by its pinnately compound leaves with 9-19 leaflets and its elongated nuts with sweet kernels.





Local Notes:



Habitat: Bottomland forests, along rivers.

Habit: Tree up to 150 feet tall, with a rounded and widely spreading crown.

Bark: Red-brown, becoming roughened into small scales.

Leaves: Alternate, pinnately compound, with 9-19 leaflets; the leaflets lanceolate, curved, tapering to a long point at the tip, rounded or tapering to the asymmetrical base, finely toothed, smooth or sometimes hairy, up to 8 inches long, up to 3 inches broad.

Flowers: Male and female flowers borne separately but on the same tree; the male flowers in long, drooping spikes; the female flowers fewer and in small clusters.

Sepals: 4, minute.

Petals: 0.

Stamens: 8-40.

Pistils: Ovary inferior.

Fruits: Ellipsoid, pointed at the tip, up to 2 inches long, up to 1 inch broad; the husk narrowly 4-winged, dark brown with yellow scales, thin, usually splitting to the base; the nut red-brown; the kernel sweet.

Notes: The kernels are extremely tasty.

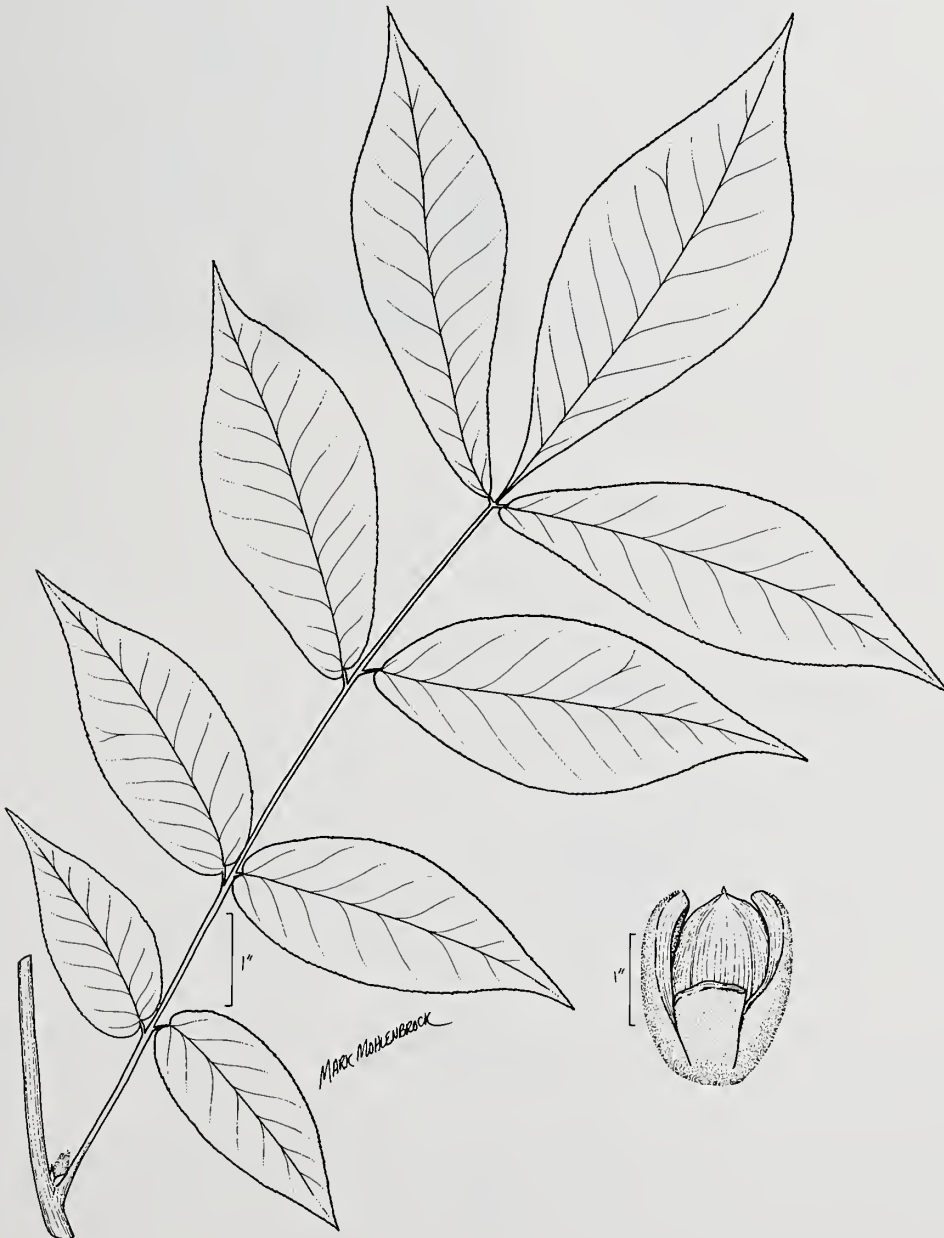
Shellbark Hickory

Carya laciniosa (Michx. f.) Loud.

Family: Walnut (Juglandaceae)

April-May

Field Marks: This is the only shaggy barked hickory that usually has 7 or 9 leaflets and a fruit at least 2 inches in diameter. The axis that bears the leaflets usually persists on the tree until the following summer.





Local Notes:



Habitat: Low woods, along streams.

Habit: Tree up to 100 feet tall, with a trunk diameter up to 3 feet; crown oblong to ovoid, with drooping lower branches.

Bark: Light gray, separating into long, thick, vertical plates which curve away from the trunk.

Buds: Dark brown, hairy, up to 3/4 inch long, the outer scales with a long, stiff point.

Leaves: Alternate, pinnately compound with 5, 7, or 9 leaflets, the leaflets lanceolate to ovate, pointed at the tip, tapering or rounded at the base, finely toothed, dark green and mostly smooth on the upper surface, paler and softly hairy on the lower surface, up to 10 inches long, about 1/2 as wide.

Flowers: Male and female flowers borne separately but on the same tree, appearing after the leaves have begun to unfold, without petals, the male flowers in slender, drooping spikes, the female flowers in clusters of 2-5.

Fruits: Spherical, often slightly sunken at the top, up to 2 1/4 inches in diameter, the husk divided all the way to the base into four sections, minutely orange-speckled and sometimes hairy, the nut with conspicuous ridges, the kernel very sweet.

Notes: The nuts are eaten by a variety of animals, including man. The wood of the shellbark hickory is used for tool handles and fuel.

Shagbark Hickory

Carya ovata (Mill.) K. Koch

Family: Walnut (Juglandaceae)

April-May

Field Marks: This hickory differs from all others by its shaggy bark and usually 5 leaflets per leaf.





Local Notes:



Habitat: Woods, both moist and dry; along streams.

Habit: Tree up to 80 feet tall, with a rounded crown.

Bark: Gray, separating into long, shreddy scales giving the trunk a shaggy appearance.

Leaves: Alternate, pinnately compound, with 5 or sometimes 7 leaflets; leaflets ovate or obovate, tapering to a short point at the tip, tapering to the base, finely toothed, smooth or hairy, up to 10 inches long, up to 5 inches broad.

Flowers: Male and female flowers borne separately but on the same plant, appearing after the leaves have begun to unfold; the male flowers in slender, drooping spikes; the female flowers in clusters of 2-5.

Sepals: 4, minute.

Petals: 0.

Stamens: 3-10.

Pistils: Styles usually 4.

Fruits: Usually spherical, up to 2 inches across; the husk yellow-green to red-brown, up to 1/2 inch thick, splitting all the way to the base; the nut 4-angled.

Notes: The kernels of the nuts are extremely tasty.

Sugarberry

Celtis laevigata Willd.

Family: Elm (Ulmaceae)

April-May

Field Marks: Species of *Celtis* have alternate, simple leaves. They differ from elms by their warty bark and presence of berries. Sugarberry usually differs from other species by its mostly narrower leaves, absence or scarcity of teeth, and smooth leaf surfaces.





Local Notes:



Habitat: Along streams, floodplain woods; less commonly in dry soil.

Habit: Tree to 75 feet tall, with an open, broad crown and drooping branches.

Bark: Gray, with many conspicuous warts.

Leaves: Alternate, simple, lanceolate, long-pointed at the tip, tapering or rounded at the base, with few or no teeth along the edges, usually smooth to the touch, up to 6 inches long, less than half as broad.

Flowers: 1 to several in drooping clusters, appearing after the leaves are partly grown, greenish yellow.

Sepals: 4-6.

Petals: 0.

Stamens: Usually 5.

Pistils: Ovary superior, with 2 stigmas.

Fruits: Fleshy, ellipsoid to nearly round, reddish orange to yellowish, about 1/4 inch in diameter, 1-seeded, borne on long, drooping stalks.

Notes: The fruits are eaten and the seeds are dispersed by birds.

Common Hackberry

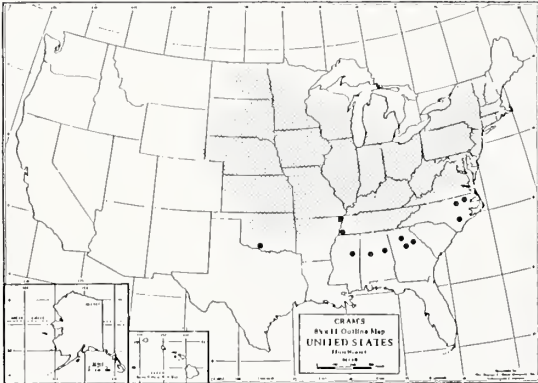
Celtis occidentalis L.

Family: Elm (Ulmaceae)

April-May

Field Marks: Although common hackberry is extremely variable, it usually has broad, coarsely toothed leaves that are rough to the touch.





Local Notes:



Habitat: Along streams, wet woods, and in drier sites.

Habit: Tree up to 80 feet tall, with many small branchlets and an oblong crown.

Bark: Gray, smooth on young trees, soon becoming warty and even scaly on old trees.

Leaves: Alternate, simple, ovate to broadly lanceolate, long-pointed at the tip, rounded or tapering at the asymmetrical base, usually coarsely toothed along the edges except sometimes near the base, usually rough-hairy to the touch on the upper surface, up to 6 inches long, up to half as broad.

Flowers: Arranged in drooping clusters, or sometimes solitary, appearing after the leaves are partly grown, greenish yellow.

Sepals: 4-6.

Petals: 0.

Stamens: Usually 5.

Pistils: Ovary superior, with 2 stigmas.

Fruits: Fleshy, elongated to nearly round, dark purple, about 1/3 inch in diameter, 1-seeded, borne on slender, drooping stalks.

Notes: The fruits are eaten and the seeds are dispersed by birds.

Buttonbush

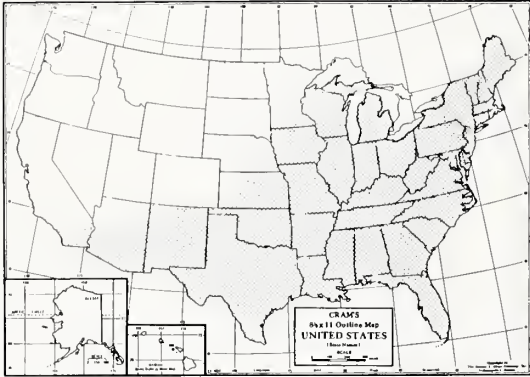
Cephalanthus occidentalis L.

Family: Madder (Rubiaceae)

June-August

Field Marks: Buttonbush is the only shrub that has whorled leaves and flowers and fruits in spherical heads.





Local Notes:



Habitat: Swamps, lakes, ponds, low woods, marshes.

Habit: Shrubs, up to 10 feet tall.

Stems: Much branched, smooth or less commonly hairy.

Leaves: Opposite and/or whorled, oblong to ovate, pointed at the tip, tapering to the base, without teeth, smooth, up to 6 inches long, up to 4 inches wide.

Flowers: Many, crowded into spherical heads up to 1 1/4 inches in diameter, white.

Sepals: 4, green, united into a short tube.

Petals: 4, white, united into a slender tube 1/4-1/3 inch long.

Stamens: 4, attached to the corolla tube and not exerted beyond it.

Pistils: Ovary inferior; styles protruding beyond the corolla tube.

Fruits: Many nutlets crowded into a spherical head, each nutlet 1/4-1/3 inch long, broadest at the top.

Notes: It is reported that the leaves are poisonous if eaten by most animals.

Leatherleaf

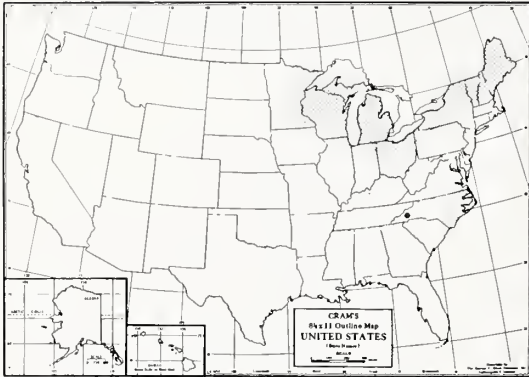
Chamaedaphne calyculata (L.) Moench

Family: Heath (Ericaceae)

April-May

Field Notes: This evergreen shrub differs from all other members of the heath family by its elongated tubular white corolla, its solitary flowers in the axils of the leaves, and its leaves that have tiny scales on the lower surface.





Local Notes:



Habitat: Bogs.

Habit: Evergreen shrubs up to 4 feet tall.

Stems: Upright, much branched, usually scaly and/or hairy.

Leaves: Alternate, simple, evergreen, elliptic to oblong, rounded or pointed at the tip, tapering to the base, minutely round-toothed, smooth or somewhat hairy and with tiny scales on the lower surface, up to 2 inches long.

Flowers: Solitary in the axils of the upper leaves, white, 1/4-1/3 inch long.

Sepals: 5, green, united only at the base.

Petals: 5, white, united into an elongated tube 1/4-1/3 inch long.

Stamens: 10, not exerted beyond the corolla.

Pistils: Ovary inferior.

Fruits: Capsules 5-lobed, smooth, about 1/6 inch long, subtended by the persistent sepals.

Gray Dogwood

Cornus foemina Mill.

Family: Dogwood (Cornaceae)

May-June

Field Marks: This is the only wetland dogwood with gray branchlets and blue fruits. The lower surface of the leaves is green and without hairs.





Local Notes:

Habitat: Swamps, low woods, wet open ground.

Habit: Shrub up to 8 feet tall, much branched.

Stems: Gray, smooth.

Leaves: Opposite, simple, lanceolate to elliptic to ovate, pointed at the tip, tapering to the base, without teeth, smooth and green on both surfaces, up to 3 inches long, up to 1 1/4 inches broad.

Flowers: Several in a round-topped cluster, white.

Sepals: 4, united, green.

Petals: 4, free from each other, white.

Stamens: 4.

Pistils: 1; style 1; ovary inferior.

Fruits: Drupes blue, spherical, 1/6-1/4 inch in diameter.

Notes: This species is usually called stiff dogwood. This species has been confused with *C. racemosa* and does not occur in the Great Plains.

Red-osier Dogwood

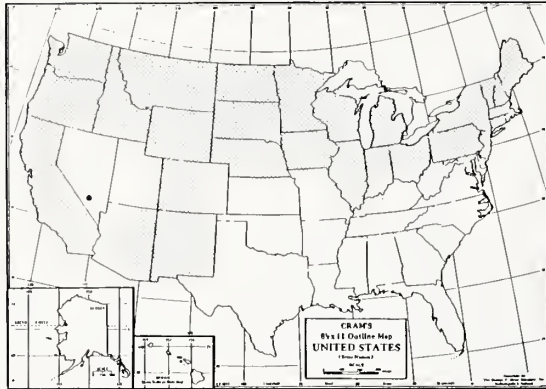
Cornus stolonifera Michx.

Family: Dogwood (Cornaceae)

May-August

Field Marks: The bright red twigs and the white fruits readily distinguish this handsome dogwood.





Local Notes:



Habitat: Wet soil along streams, around ponds and lakes, in bogs.

Habit: Shrub up to 8 feet tall, spreading by stolons.

Stems: Young branches bright red, smooth or less commonly hairy.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, rounded or tapering to the base, without teeth, usually mostly or slightly hairy on both surfaces, up to 4 inches long, up to 3 inches broad.

Flowers: Several in a round-topped or flat-topped cluster, white.

Sepals: 4, united, green

Petals: 4, free, white.

Stamens: 4.

Pistils: 1; style 1; ovary inferior.

Fruits: Drupes white, spherical, 1/3 inch in diameter.

Notes: This species often forms dense thickets due to its stoloniferous growth form.

Water Willow

Decodon verticillatus (L.) Elliott

Family: Loosestrife (Lythraceae)

July-September

Field Marks: This shrub is recognized by its opposite or sometimes whorled leaves, its pink-rose flowers in dense axillary clusters, and its spherical, dark brown capsules.





Local Notes:



Habitat: Swamps and sink-hole ponds, often in standing water; marshes; streams.

Habit: Perennial herb or shrub but with a woody base, the tip of the stem capable of rooting and forming dense beds.

Stems: Erect to arching, woody at least below, smooth to hairy, angular, up to 8 feet tall.

Leaves: Opposite or sometimes in whorls of 3 or 4, simple, elliptic to lanceolate, pointed at the tip, tapering to the base, without teeth, smooth or hairy, up to 6 inches long, up to 1 1/2 inches wide, without stalks.

Flowers: Several crowded in dense clusters in the axils of the uppermost leaves, up to 1 inch across, pink-rose, borne on stalks.

Sepals: 5-7, united to form a cup, green, to 1/4 inch long.

Petals: Usually 5, free, pink-rose, up to 1/2 inch long.

Stamens: 10, with 5 of them longer than the other 5.

Pistils: 1; style 1; ovary superior.

Fruits: Capsules nearly spherical, dark brown, up to 1/3 inch in diameter; seeds numerous, reddish.

Notes: Seeds of this plant are eaten by waterfowl. Muskrats sometimes eat the stems.

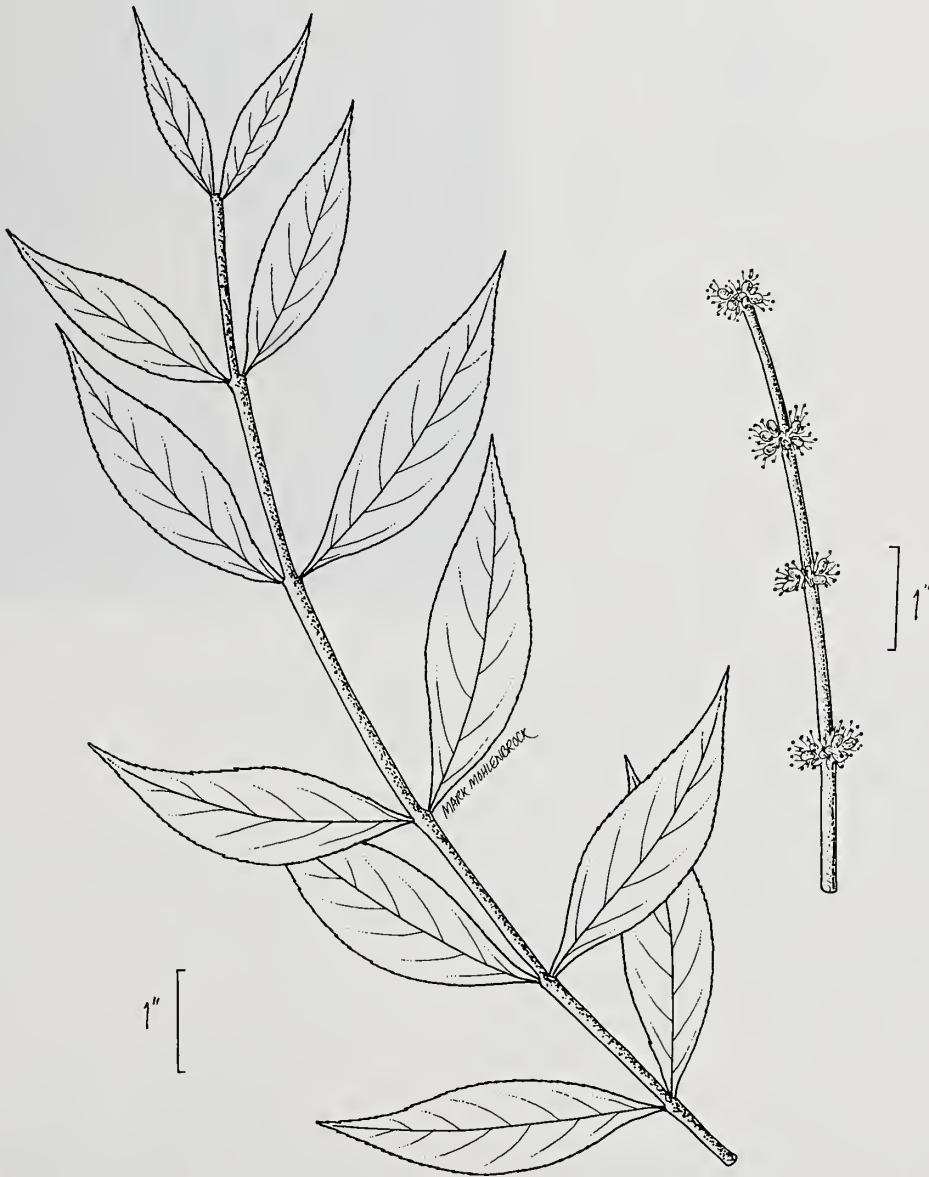
Swamp Privet

Forestiera acuminata (Michx.) Poir.

Family: Ash (Oleaceae)

March-April

Field Marks: This species differs by its opposite, simple leaves that taper to a long point at the tip and by its yellow flowers that bloom before the leaves appear. The trunks are smooth and gray or brown.





Local Notes:



Habitat: Swamps, wet woods, along streams, around ponds, in sloughs.

Habit: Small tree up to 30 feet tall; crown spreading and irregular.

Bark: Gray or brown, smooth.

Buds: Spherical, up to 1/8 inch in diameter, smooth.

Leaves: Opposite, simple, elliptic, long-pointed at the tip, tapering to the base, finely toothed, usually smooth, up to 4 inches long, up to 1 1/2 inches broad.

Flowers: Male and female flowers borne on different trees, appearing before the leaves begin to unfold, yellow.

Sepals: Minute or absent.

Petals: 0.

Stamens: 2 or 4.

Pistils: Ovary superior.

Fruits: Drupes slender, oblongoid, slightly curved, dark purple, up to 1 inch long, 1-seeded.

Green Ash

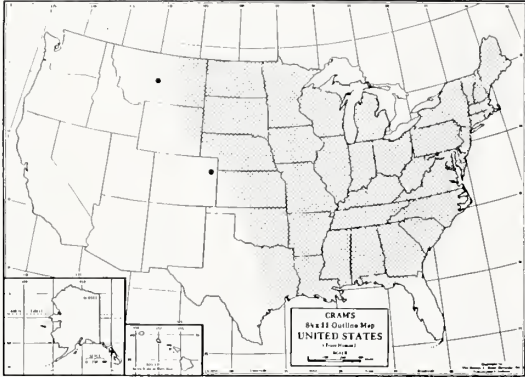
Fraxinus pennsylvanica Marshall

Family: Ash (Oleaceae)

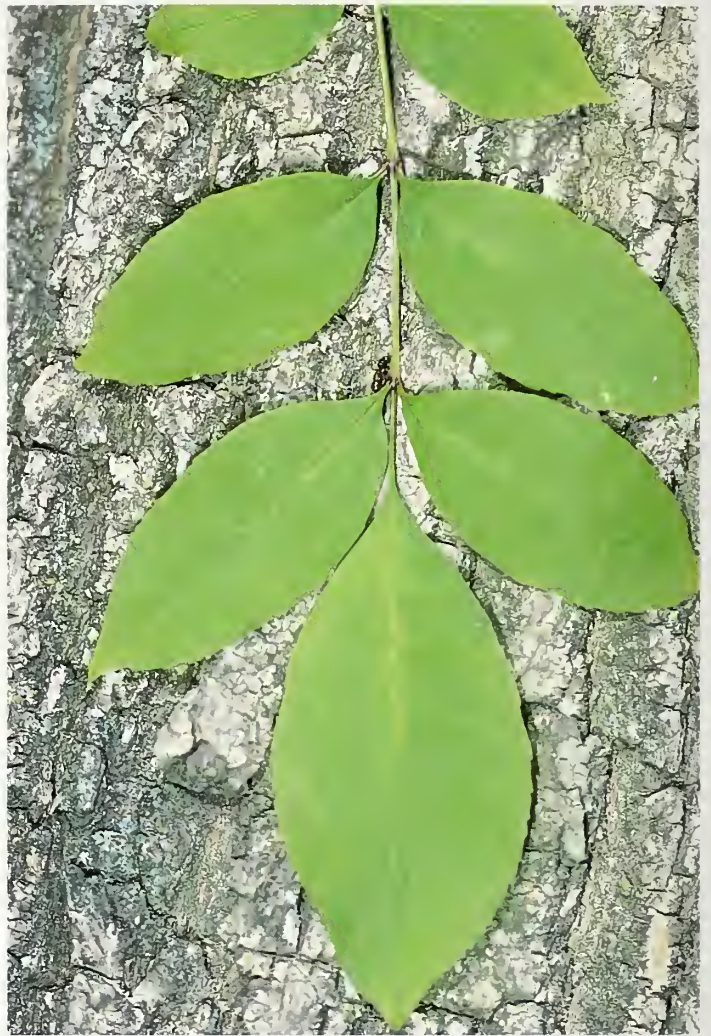
April-May

Field Marks: The green ash has leaflets not decidedly paler on the lower surface and usually at least partially toothed. The young, expanding leaves are purplish.





Local Notes:



Habitat: Floodplain woods, swamps, along streams, around ponds.

Habit: Tree up to 60 feet tall with a pyramidal to broadly rounded crown.

Bark: Light or dark gray, with diamond-shaped furrows between flat-topped, sometimes scaly ridges.

Leaves: Opposite, pinnately compound, with 7-9 leaflets; each leaflet lanceolate to elliptic to elliptic-ovate, pointed at the tip, tapering to the base, toothed along the edges, green and either smooth or hairy on both surfaces, up to 6 inches long, up to 2 inches broad.

Flowers: Male and female borne on separate trees, in branched clusters, green or purplish.

Sepals: Minute.

Petals: 0.

Stamens: 2.

Pistils: Ovary superior.

Fruits: Samaras lance-shaped, up to 2 1/2 inches long, up to 1/2 inch broad, with the wing not extending to the base of the seed.

Notes: Trees with hairy twigs and lower leaf surfaces are sometimes called red ash. No tree manual lists this species from area 8, although it is attributed to that region in the National Wetlands Inventory list.

Possumhaw Holly
Ilex decidua Walter

Ilex decidua Walter

Family: Holly (Aquifoliaceae)

April-May

Field Marks: This deciduous holly differs from all others by its shallower round-toothed leaves, its completely smooth sepals, and its flower parts usually in 4's.





Local Notes:



Habitat: Swamps, sloughs, wet woods, along streams, around ponds and lakes.

Habit: Shrub or small tree up to 20 feet tall.

Stems: Branchlets gray, smooth or hairy.

Leaves: Alternate, simple, elliptic to obovate, pointed at the tip, tapering to the base, round-toothed, usually hairy, up to 3 inches long, deciduous.

Flowers: Small, white, less than 1/4 inch long, the male parts sometimes separate from the female parts; male flowers 1-3 in stalkless clusters from the axils of the leaves; female flowers usually solitary in the axils of the leaves.

Sepals: 4-6, green, smooth.

Petals: 4-6, white, free from each other.

Stamens: 4-6, exserted beyond the petals.

Pistils: 1; ovary superior.

Fruits: Drupes spherical, usually red, 1/6-1/3 inch in diameter; seeds 5-10, smooth but grooved, 1/6-1/4 inch long.

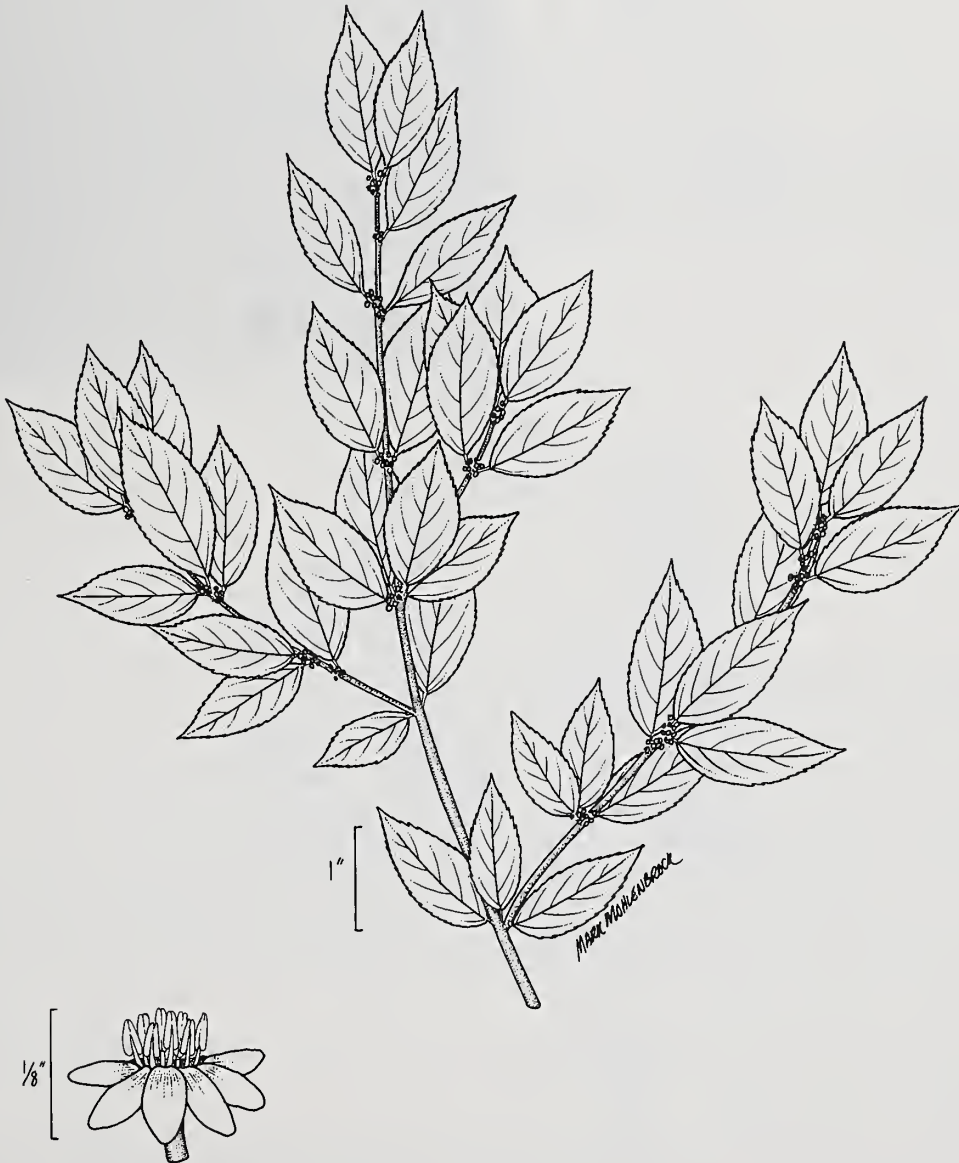
Notes: The fruits are eaten by wildlife.

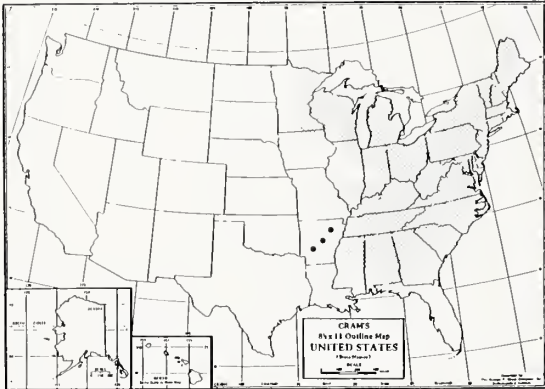
Winterberry
Ilex verticillata (L.) Gray

Family: Holly (Aquifoliaceae)

May-June

Field Marks: This holly differs from the similar possumhaw holly by slightly larger teeth of the leaves and by usually having more than 4 sepals and petals.





Local Notes:



Habitat: Bogs; along streams; low woods.

Habit: Shrub or small tree up to 25 feet tall.

Stems: Branchlets usually gray, smooth or hairy.

Leaves: Alternate, simple, broadly elliptic, pointed at the tip, tapering to the base, finely toothed, smooth or sometimes slightly hairy, up to 3 inches long, deciduous.

Flowers: Small, white, less than 1/4 inch long, the male parts sometimes separate from the female parts; male flowers up to 25 in a stalked cluster from the axils of the leaves; female flowers 1-3 in stalkless clusters from the axils of the leaves; flowers with both stamens and pistils also present.

Sepals: 5-6, green, ciliate.

Petals: 5-8, white, free from each other.

Stamens: 5-8, exserted beyond the petals.

Pistils: 1; ovary superior.

Fruits: Drupes spherical, bright red, up to 1/4 inch in diameter; seeds 5-10, smooth, 1/8-1/6 inch long.

Notes: The berries are eaten by birds.

Shrubby Cinquefoil

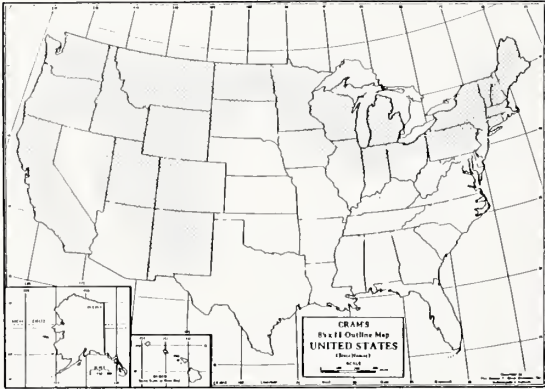
Potentilla fruticosa L.

Family: Rose (Rosaceae)

June-September

Field Marks: This shrubby *Potentilla* is further distinguished by its leaves which are pinnately divided usually into 5 leaflets.





Local Notes:



Habitat: Fens, bogs, around interdunal ponds.

Habit: Much branched shrub up to 3 feet tall.

Stems: Bark brown, coming off in shreds.

Leaves: Alternate, pinnately divided into 5 or less commonly 7 leaflets, the leaflets narrowly oblong, pointed at the tip, tapering to the base, without teeth, hairy, up to 1 inch long.

Flowers: Solitary or few in a cluster at the end of the branches, yellow, up to 1 1/4 inches across.

Sepals: 5, green.

Petals: 5, yellow, free from each other.

Stamens: Numerous.

Pistils: Several, hairy, each with a superior ovary.

Fruits: A cluster of achenes.

Common Chokecherry

Prunus virginiana L.

Family: Rose (Rosaceae)

April-July

Field Marks: The combination of flowers in a raceme, leaves elliptic, flowers on short stalks, and red fruits distinguishes this species.





Local Notes:



Habitat: Sandy woods along large lakes, along streams.

Habit: Shrub or small tree to 25 feet tall, with extensive rhizomes.

Stems: Bark smooth, black.

Leaves: Alternate, simple, elliptic to obovate, pointed at the tip, rounded at the base, finely toothed, smooth, up to 3 inches long, up to 2 inches broad.

Flowers: Several in elongated racemes, white, up to 1/2 inch across, on stalks up to 1/2 inch long.

Sepals: 5, green, free from each other, 1/20 inch long.

Petals: 5, white, free from each other, 1/4-1/3 inch long.

Stamens: Numerous.

Pistils: 1; styles 1; ovary superior.

Fruits: Drupes spherical, dark red, up to 1/2 inch in diameter.

Notes: The fruits are eaten by wildlife.

Swamp White Oak

Quercus bicolor Willd.

Family: Beech (Fagaceae)

April-May

Field Marks: This is the only coarsely toothed oak in the white oak group that has the acorns borne on stalks at least one inch long.





Local Notes:



Habitat: Bottomland woods, swamps, along streams.

Habit: Tree to 70 feet tall, with a trunk diameter up to 3 feet; crown rounded and broad.

Bark: Gray-brown, deeply furrowed, becoming flaky.

Buds: Clustered at the tips of the twigs, ellipsoid to spherical, yellow-brown, smooth or with a few hairs at the tip, up to 1/8 inch long.

Leaves: Alternate, simple, usually broadest above the middle, coarsely round-toothed or sometimes with a few shallow lobes, smooth and somewhat hairy on the upper surface, white and softly hairy on the lower surface, up to 6 inches long, up to 4 inches broad; leaf stalks up to 1 inch long, smooth or slightly hairy.

Flowers: Male and female borne separately, but on the same tree, appearing when the leaves begin to unfold, minute, without petals, the male flowers in slender, drooping spikes, the female flowers in groups of 2-4.

Fruits: Acorns in pairs, on stalks 1 inch long or longer, the nut ovoid, pale brown, 1-1 1/2 inches long, enclosed about 1/3 its length by the cup, the cup thick, light brown, hairy, roughened.

Notes: The wood of this species is used for interior finishing, cabinets, fuel, and fence posts.

Bur Oak

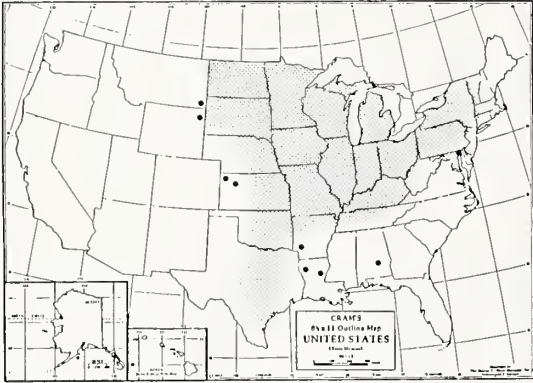
Quercus macrocarpa Michx.

Family: Beech (Fagaceae)

April-May

Field Marks: This oak is distinguished by its large acorn with a fringed cup and by its deep pair of sinuses just below the middle of the leaf.





Local Notes:



Habitat: Bottomland woods, along rivers and streams; many times in drier habitats.

Habit: Tree up to 120 feet tall with a rounded crown and stout branches.

Bark: Dark brown or yellow-brown, rather deeply furrowed.

Leaves: Alternate, simple, broader at the upper end, coarsely round-toothed, usually with a pair of deep sinuses just below the middle of the leaf, often with 5 or 7 lobes, not bristle-tipped, usually hairy on the lower surface, up to 14 inches long, up to 7 inches wide.

Flowers: Male and female borne separately, but on the same tree; the male in slender, drooping spikes; the female few in a group.

Sepals: 0.

Petals: 0.

Stamens: 3-12.

Pistils: Ovary inferior.

Fruits: Acorns usually solitary, the nut ovoid to ellipsoid, dark brown, up to 1 3/4 inches long, the cup covering half to nearly all of the nut, hairy, the lowermost scales long-fringed.

Swamp Chestnut Oak

Quercus michauxii Nutt

Family: Beech (Fagaceae)

April-May

Field Marks: This oak possesses leaves with coarse teeth but no lobes and a hairy lower surface that is usually somewhat velvety to the touch. The cup of the acorn is at least 1 inch across.





Local Notes:



Habitat: Low woods, swamps, sloughs, bayous, along streams.

Habit: Tree up to 100 feet tall, with a trunk diameter up to 6 feet and a rounded crown.

Bark: Gray or silvery white, scaly.

Leaves: Alternate, simple, obovate, pointed at the tip, rounded or tapering to the base, coarsely toothed along the edges, densely hairy and velvety on the lower surface, up to 10 inches long, up to 6 inches broad.

Flowers: Male and female borne separately but on the same tree; the male crowded into long, slender spikes; the female few in a cluster.

Sepals: 0.

Petals: 0.

Stamens: 5.

Fruits: Acorns solitary or paired, with or without short stalks, the nut ovoid to ellipsoid, brown, up to 1 1/2 inches long, enclosed about 1/3 its length by the cup; the cup thick, hairy, at least 1 inch across.

Notes: This species is sometimes known as basket oak or cow oak. The acorns are relatively sweet and are a source of food for wildlife.

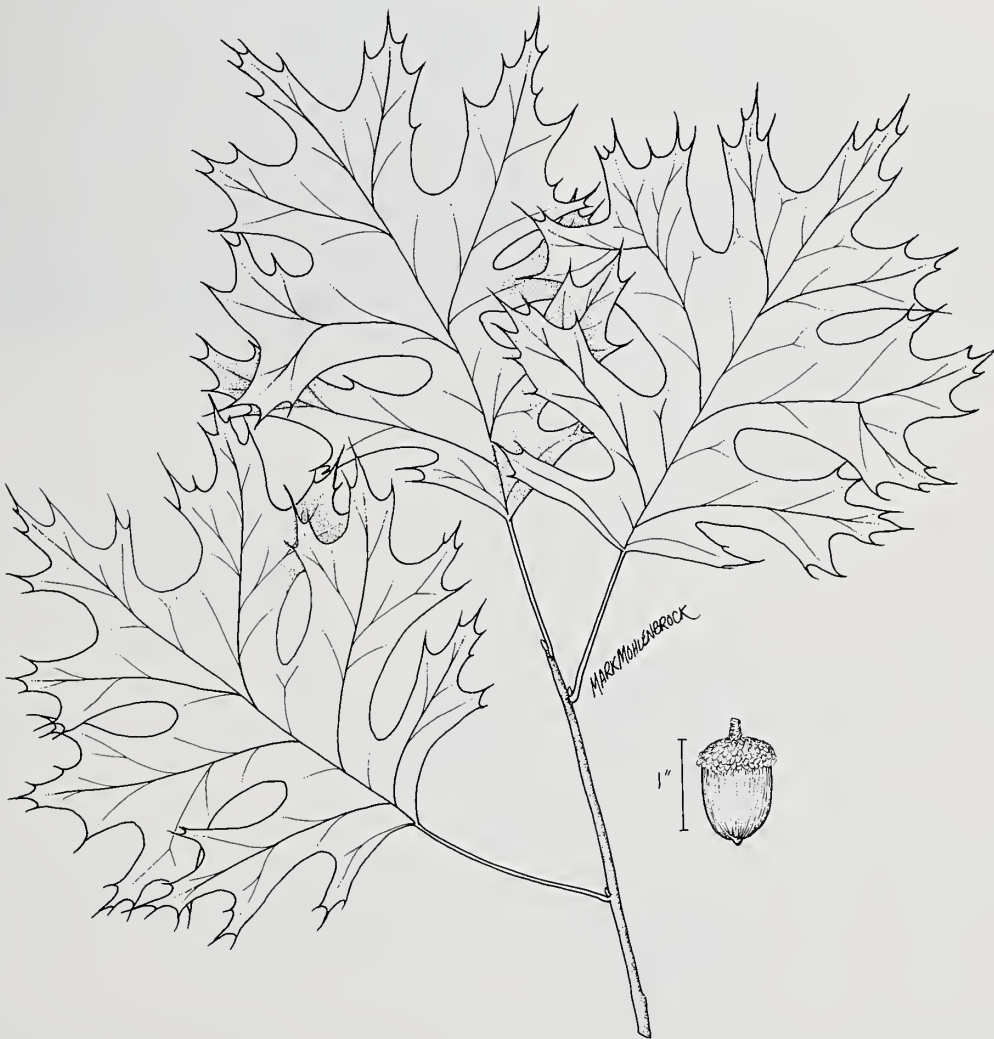
Shumard Oak

Quercus shumardii Buckl.

Family: Beech (Fagaceae)

April-May

Field Marks: Among the red oak group, *Quercus shumardii* is distinguished by its leaves that are hairy only in the axils of the veins on the lower surface, and by its smooth gray buds.





Local Notes:



Habitat: Low woods, along streams.

Habit: Tree up to 120 feet tall, with a trunk diameter up to 5 feet; crown broad and open, with wide-spreading branches.

Bark: Firmly ridges and dark brownish black.

Buds: Smooth, gray, about 1/3 inch long.

Leaves: Alternate, simple, straight across or somewhat wedge-shaped at the base, with 2-4 pairs of lobes divided over 2/3's the way to the mid-vein, each lobe toothed and bristle-pointed at the tip, the sinuses broadly rounded, dark green and shiny above, smooth below except for tufts of hairs in the axils of the veins; leaf stalks slender, smooth, up to 2 1/2 inches long.

Flowers: Male and female flowers borne separately, but on the same plant, appearing as the leaves unfold, inconspicuous, the male crowded into a slender, drooping spike, the female solitary or 2-3 together.

Fruits: Acorns ripening in October of the second year, on stalks less than 1/4 inch long, the nut broadly ovoid, short-pointed at the base, flat on top, up to 1 1/4 inches long, about 3/4 inches wide, light brown; cup shallow, about 1/4 to 1/3 covering the acorn, with closely appressed, densely short woolly scales.

Notes: The wood is used for interior finishing and furniture.

Swamp Rose
Rosa palustris Marshall

Family: Rose (Rosaceae)

July-September

Field Marks: This is the only wetland wild rose that has 7 leaflets and large pink flowers.





Local Notes:



Habitat: Swamps, marshes.

Habit: Shrub up to 7 feet tall.

Stems: Much branched, with stout, flat, curved spines up to 1/4 inch long.

Leaves: Alternate, pinnately divided into 7 leaflets, the leaflets elliptic, pointed at the tip, tapering to the base, toothed, hairy, up to 1 1/2 inches long.

Flowers: Solitary or few in a cluster, pink, up to 3 inches across.

Sepals: 5, green.

Petals: 5, pink, free from each other.

Stamens: Numerous.

Pistils: Numerous, each with a superior ovary.

Fruits: Fleshy, red, up to 3/4 inch in diameter.

Notes: The fruits are eaten by wildlife.

Peachleaf Willow

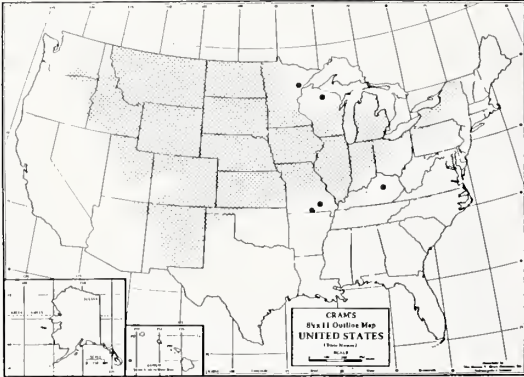
Salix amygdaloides Anderss.

Family: Willow (Salicaceae)

April-June

Field Marks: The leaves of the peachleaf willow are pale on the lower surface. Leaf-like stipules at the base of each leafstalk are lacking.





Local Notes:

Habitat: Low woods, along streams.

Habit: Tree up to 60 feet tall, with a narrowly rounded crown.

Bark: Gray-brown at maturity, becoming somewhat scaly.

Leaves: Alternate, simple, broadly lance-shaped, long-pointed at the tip, rounded or tapering to the base, finely toothed, pale on the lower surface, up to 5 inches long; stipules not persistent.

Flowers: Male and female flowers borne on separate trees in elongated spikes as the leaves begin to unfold.

Sepals: 0.

Petals: 0.

Stamens: 3 or more.

Pistils: Ovary on a short stalk.

Fruits: Capsules brown, flask-shaped, up to 1/6 inch long.

Notes: Atlas of United States Trees by Little (1971) does not attribute this species to the southeastern states, although it is listed from there in the National Wetlands Inventory list.

Hoary Willow

Salix candida Fluegge

Family: Willow (Salicaceae)

May-July

Field Marks: This shrubby willow is further distinguished by the mat of dense white hairs on the lower surface of the leaves.





Local Notes:



Habitat: Bogs, marshes.

Habit: Shrub to 2 1/2 feet tall.

Stems: Upright, branched, brown, very hairy when young, becoming smooth.

Leaves: Alternate, simple, narrowly oblong, pointed at the tip, tapering to the base, with or without teeth, densely white-hairy on the lower surface, up to 3 inches long, less than 1 inch wide.

Flowers: Many flowers crowded into dense, cylindrical spikes up to 2 inches long; the male and female flowers in different spikes; each flower tiny, subtended by a bract.

Sepals: 0.

Petals: 0.

Stamens: 2.

Pistils: Ovary 1.

Fruits: Capsules lanceoloid, white-hairy, about 1/3 inch long.

Pussy Willow
Salix discolor Muhl.

Family: Willow (Salicaceae)

April-May

Field Marks: The distinguishing features of the pussy willow are the broadly elliptic leaves that are usually rounded at the base and white but smooth on the lower surface.





Local Notes:



Habitat: Marshes, bottomland woods.

Habit: Shrub or small tree up to 20 feet tall.

Stems: Brown, hairy when young, becoming smooth.

Leaves: Alternate, simple, broadly elliptic, pointed at the tip, tapering or rounded at the base, finely toothed, smooth, white on the lower surface, up to 1 1/2 inches long.

Flowers: Many crowded into dense, cylindrical spikes up to 3 inches long, the male and female flowers in different spikes, each flower tiny, subtended by 1 bract.

Sepals: 0.

Petals: 0.

Stamens: 2.

Pistils: Ovary 1.

Fruits: Capsules long-tapering, gray-hairy, up to 1/2 inch long.

Sandbar Willow

Salix exigua Nutt.

Family: Willow (Salicaceae)

April-June

Field Marks: This willow is distinguished by the fewer number of teeth along the margins of the leaves.





Local Notes:



Habitat: Along streams, sandbars, frequently forming thickets.

Habit: Tree up to 25 feet tall, with an irregular crown.

Bark: Gray, furrowed, broken into rough scales.

Leaves: Alternate, simple, very long and narrow, pointed at the tip, tapering to the base, with widely spaced teeth, usually smooth at maturity, up to 4 inches long, less than 1/2 inch broad.

Flowers: Many in elongated spikes, the male and female flowers borne separately on separate plants.

Sepals: 0.

Petals: 0.

Stamens: 2.

Pistils: Ovary 1.

Fruits: Capsules flask-shaped, smooth or silky, brownish, up to 1/8 inch long.

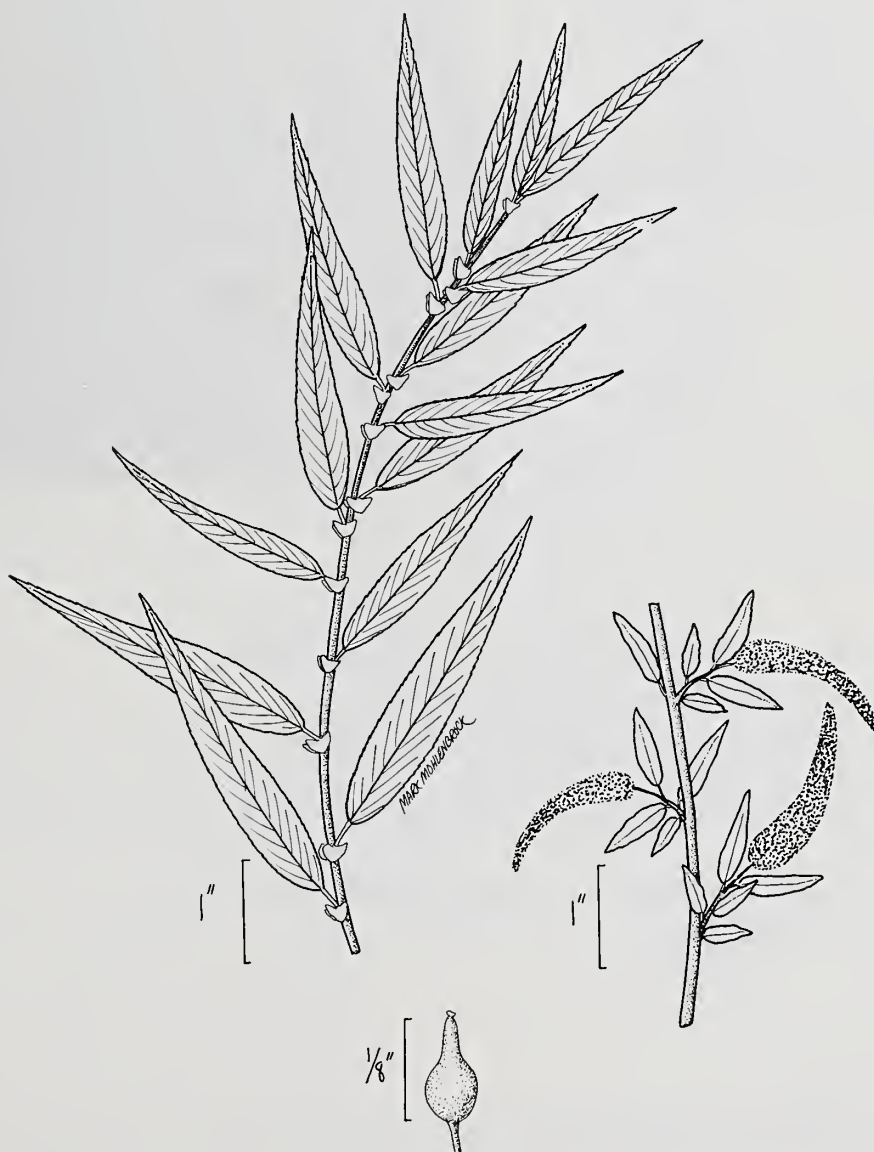
Black Willow

Salix nigra Marshall

Family: Willow (Salicaceae)

April-May

Field Marks: Black willow is distinguished by its narrow leaves, green on the lower surface, and the presence of heart-shaped stipules.





Local Notes:



Habitat: Along streams, marshes, swamps, around lakes and ponds.

Habit: Tree up to 90 feet tall, usually round-topped.

Bark: Rough, furrowed, forming elongated, vertical, rather tight scales.

Leaves: Alternate, simple, narrowly lanceolate, pointed at the tip, rounded or tapering to the base, finely toothed, smooth, green on both surfaces, up to 6 inches long; stipules present, heart-shaped.

Flowers: Many borne in slender, elongated spikes; the male and female flowers borne in separate spikes on separate plants.

Sepals: 0.

Petals: 0.

Stamens: 3-7.

Pistils: Ovary 1.

Fruits: Capsules flask-shaped, reddish brown, up to 1/8 inch long.

American Elder

Sambucus canadensis L.

Family: Honeysuckle (Caprifoliaceae)

May-July

Field Marks: This coarse herb is distinguished by its opposite, pinnately compound leaves and its huge cymes of small white flowers.





Local Notes:



Habitat: Along streams, moist woods.

Habit: Shrub with several stems, scarcely woody.

Stems: Erect, branched, smooth, up to 12 feet tall.

Leaves: Opposite, pinnately compound, with 5-11 leaflets; the leaflets lanceolate to ovate, long-pointed at the tip, rounded or tapering to the base, toothed, smooth, up to 6 inches long, up to 2 1/2 inches broad.

Flowers: Numerous in large, compound cymes up to 1 foot across; each white flower up to 1/3 inch across.

Sepals: 5, green, very tiny.

Petals: 5, white, united below.

Stamens: 5, longer than the petals.

Pistils: Ovary inferior.

Fruits: Berries spherical, purple, up to 1/4 inch in diameter, usually with 4 light brown, oblongoid, wrinkled seeds.

Notes: The berries are edible. The range map gives only the native distribution of this species and does not account for ornamental specimens.

Nannyberry
Viburnum lentago L.

Family: Honeysuckle (Caprifoliaceae)

May-June

Field Marks: This *Viburnum*, with finely toothed leaves, differs further by its wavy-edged leaf stalks and its long-pointed leaves.





Local Notes:



Habitat: Low woods, along streams.

Habit: Small tree up to 25 feet tall; crown rounded.

Bark: Red-brown, broken into an irregular pattern.

Buds: Red, nearly smooth, long-pointed.

Leaves: Opposite, simple, ovate, long-pointed at the tip, tapering or rounded at the base, finely toothed, smooth or slightly hairy, up to 3 inches long, up to 1 1/2 inches broad; leaf stalks wavy-edged.

Flowers: Many, in broad, round-topped clusters, up to 1/3 inch wide, white.

Sepals: 5, minute.

Petals: 5, white, united.

Stamens: 5, attached to the petals.

Pistils: Ovary inferior.

Fruits: Drupes oval to ellipsoid, blue-black, up to 1/2 inch long.

Notes: The leaves turn purple-red in the autumn. The fruits are edible.

Black Haw

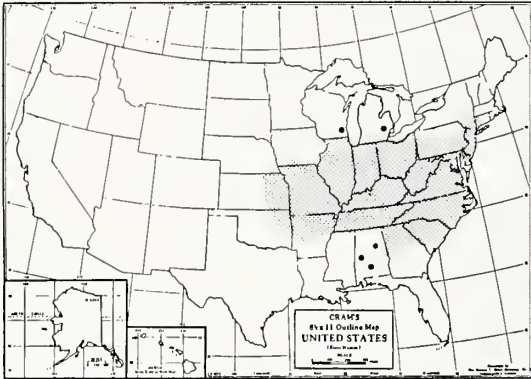
Viburnum prunifolium L.

Family: Honeysuckle (Caprifoliaceae)

April-May

Field Marks: This *Viburnum* has finely toothed leaves. It lacks the rusty hairs on the buds and the leaf stalks that *Viburnum rufidulum* possesses.





Local Notes:

Habitat: Along streams, moist woods.

Habit: Small tree up to 25 feet tall, with an irregular crown.

Bark: Reddish brown, broken into irregular plates.

Leaves: Opposite, simple, oval to ovate, short-pointed at the tip, rounded or tapering to the base, finely toothed, smooth, up to 3 inches long, up to 2 inches broad; leaf stalks smooth, not rusty hairy.

Flowers: Many in broad, round-topped clusters, small and white.

Sepals: 5, green, very small.

Petals: 5, white, united below.

Stamens: 5, protruding beyond the petals.

Pistils: Ovary inferior.

Fruits: Fleshy, oval to ellipsoid, blue-black, up to 2/3 inch long, sweet.

Notes: The fruits may be made into jams and jellies.

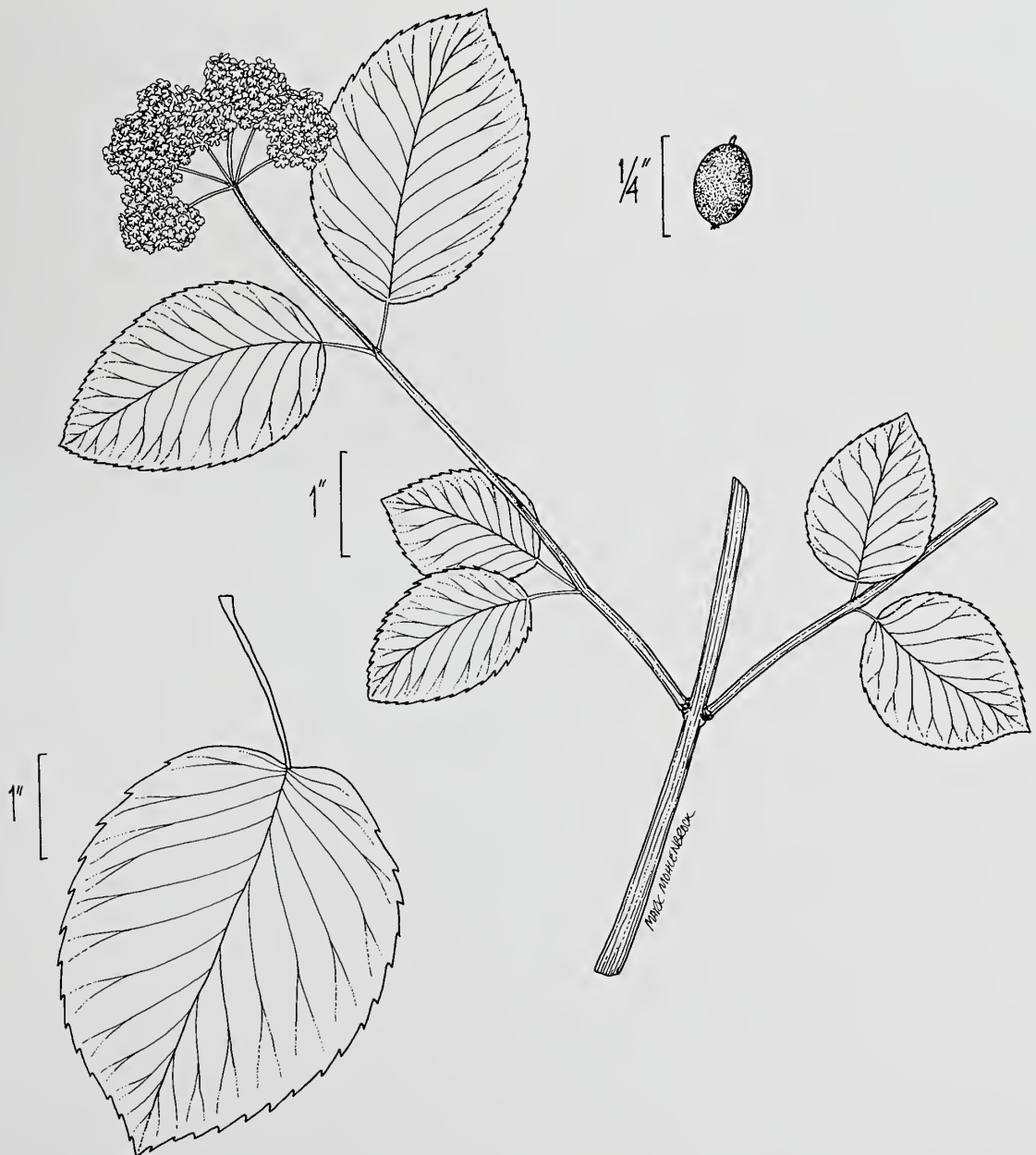
Arrow-wood

Viburnum recognitum Fernald

Family: Honeysuckle (Caprifoliaceae)

May-June

Field Marks: This *Viburnum* differs from all others by its coarsely toothed leaves that are completely smooth.





Local Notes:

Habitat: Along streams, around ponds and lakes.

Habit: Shrub to 10 feet tall.

Bark: Gray, not scaly.

Leaves: Opposite, simple, ovate to orbicular, pointed at the tip, rounded or heart-shaped at the base, coarsely toothed, smooth, up to 4 inches long, up to 3 inches broad.

Flowers: White, many, in dense clusters up to 4 inches across.

Sepals: 5, green, united below.

Petals: 5, white, united at base.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Fleshy, blue-black, up to 1/2 inch long, 1-seeded.

GROUP 6

**Dicot Herbs
With Some of the Leaves
Compound**

Small-flowered Agrimony

Agrimonia parviflora Soland.

Family: Rose (Rosaceae)

August-September

Field Marks: Agrimonias are distinguished by having small leaflet-like segments interspersed among the regular leaflets. The small-flowered agrimony is further recognized by having some leaves with 11 or more regular leaflets per leaf (excluding the tiny interspersed segments).





Local Notes:



Habitat: Along streams, wet prairies, wet meadows, swamps, roadside ditches.

Habit: Perennial herb with tuberous rhizomes.

Stems: Erect, densely hairy with some of the hairs longer than the others, up to 3 feet tall.

Leaves: Alternate, pinnately compound, with some leaves with at least 11-19 large leaflets and several small leaflet-like segments interspersed; the larger leaflets oblanceolate, pointed at the tip, tapering to the base, coarsely toothed, hairy, up to 4 inches long, up to 1 inch broad.

Flowers: Yellow, numerous, borne in a terminal, elongated raceme, each flower up to 1/4 inch in diameter.

Sepals: 5, united, green.

Petals: 5, free from each other, yellow, up to 1/10 inch long.

Stamens: Usually 5, sometimes 6 or 7.

Pistils: Ovary superior.

Fruits: Bristly with hooked hairs, containing spherical nutlets about 1/10 inch in diameter.

Notes: The small bristly fruits often cling to the fur of mammals.

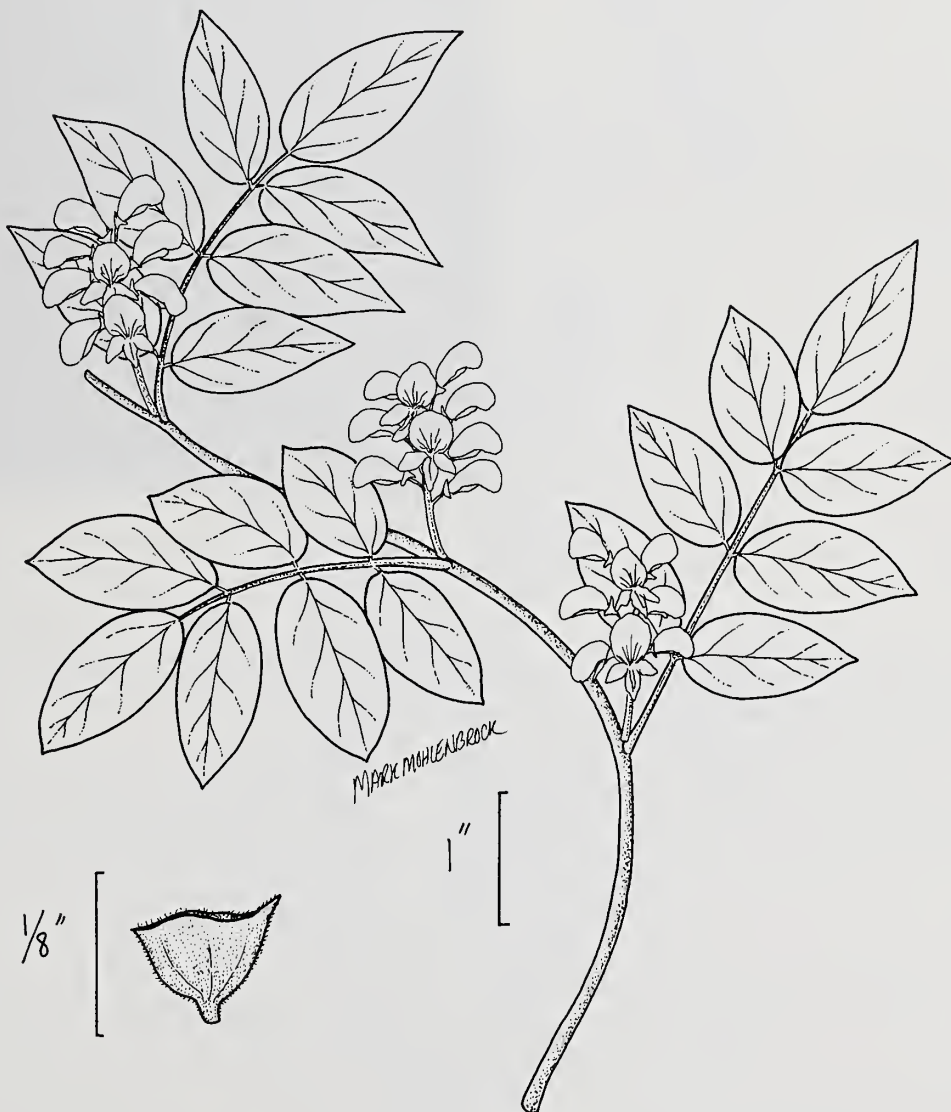
American Potatobean

Apios americana Medik.

Family: Pea (Fabaceae)

June-September

Field Marks: This viny member of the pea family has 5 or 7 leaflets and maroon or brown-purple flowers.





Local Notes:



Habitat: Wet meadows, along streams, wet woods, around ponds and lakes, in sloughs.

Habit: Perennial, herbaceous, twining vine with fleshy tubers.

Stems: Twining, smooth or with short hairs, up to 10 feet long.

Leaves: Alternate, pinnately divided into 5 or 7 leaflets, each leaflet lanceolate to ovate, pointed at the tip, rounded or tapering to the base, without teeth, smooth or with short hairs, up to 3 inches long.

Flowers: Several in short racemes in the axils of the leaves, maroon or brown-purple, up to 2/3 inch long.

Sepals: 5, united below, green, smooth or hairy.

Petals: 5, the parts arranged like those in a sweet pea, maroon or brown-purple, up to 2/3 inch long.

Stamens: 10.

Pistils: Ovary superior.

Fruits: Pods linear, up to 5 inches long, up to 1/3 inch broad.

Notes: This species is also known as groundnut. The tubers are edible by humans.

Bitter Wintercress

Barbarea vulgaris R. Br.

Family: Mustard (Brassicaceae)

April-June

Field Marks: This is the only yellow-flowered mustard with completely smooth pinnately lobed leaves and long, cylindrical fruits with a short terminal beak.





Local Notes:



Habitat: Wet meadows, roadsides, cultivated fields, fallow fields.

Habit: Annual or biennial herbs with a taproot.

Stems: Erect, branched, smooth, up to 2 1/2 feet tall.

Leaves: Alternate and basal, deeply pinnately divided into 3-9 lobes, smooth with wavy edges, up to 8 inches long.

Flowers: Several in racemes, yellow, up to 1/2 inch wide, on slender stalks.

Sepals: 4, green.

Petals: 4, free, yellow, about 1/3 inch long.

Stamens: 6.

Pistils: Ovary superior.

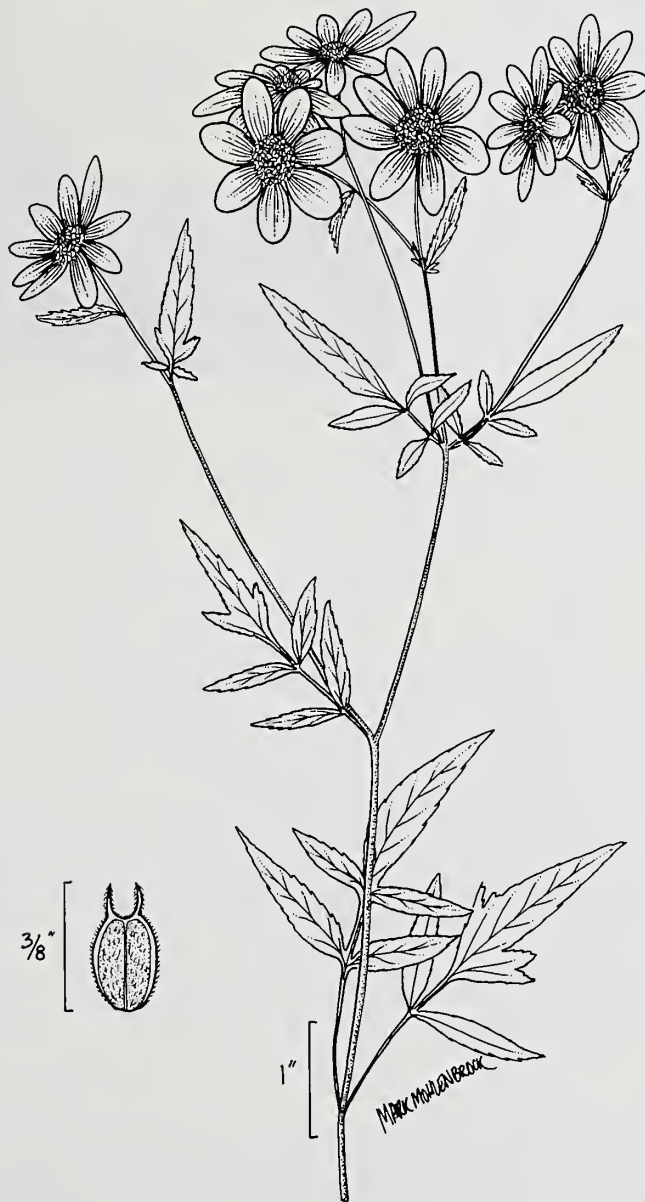
Fruits: Pods cylindrical, smooth, up to 1 1/2 inches long, with a sterile beak about 1/8 inch long, on slender stalks about 1/4 inch long.

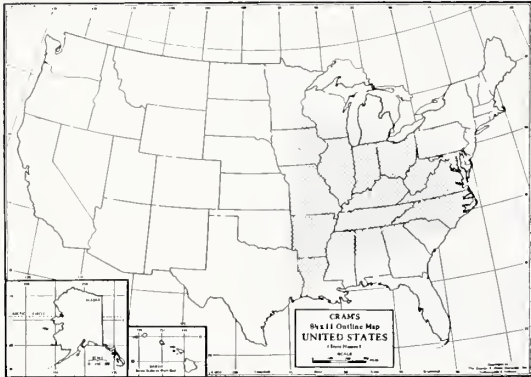
Notes: The young stems and leaves of this species can be cooked and eaten as a vegetable.

Bidens aristosa (Michx.) Britt.

Family: Aster (Asteraceae)

Field Marks: *Bidens* are recognized by their flat fruits with a pair of barbed awns at the tip. *Bidens aristosa* differs from all other species of the genus with yellow rays by its coarsely toothed or lobed leaflets, its ciliate fruits and the presence of 8-12 outer bracts subtending each head.





Local Notes:

Habitat: Wet meadows, wet prairies, marshes, roadside ditches, cultivated fields, fallow fields.

Habit: Annual herbs with a taproot.

Stems: Erect, smooth or slightly hairy, up to 4 feet tall.

Leaves: Opposite, pinnately divided into 5 or 7 lobes or leaflets, each segment coarsely toothed or lobed, up to 3 inches long, up to 1 inch wide, usually hairy on the lower surface.

Flowers: Many crowded together into a head, the outer yellow and flat, the inner yellow and tubular, forming a disk, with several heads per plant, each head subtended by 8-12 leafy bracts.

Sepals: 0.

Petals: Some yellow, united to form flat rays up to 1 inch long and up to 1/2 inch wide, others yellow, 5-lobed, united below into a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes flat, ciliate, black or yellow-black, and 1/4 inch long, with two small, stiff barbed awns at the upper end.

Notes: The fruits of this species adhere to the coats of animals and to clothing and are dispersed in this manner.

Devils Beggarsticks

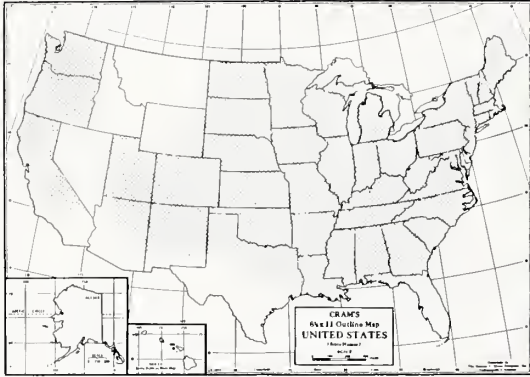
Bidens frondosa L.

Family: Aster (Asteraceae)

August-October

Field Marks: *Bidens frondosa* is one of the *Bidens* without ray flowers. It differs from other rayless species by its pinnately divided leaf segments and the 5-8 leafy bracts which subtend each flowering head.





Local Notes:

Habitat: Low woods, wet meadows, swamps, roadside ditches, along streams, around lakes and ponds, marshes, fields.

Habit: Annual herbs with a taproot.

Stems: Erect, branched, smooth, up to 4 feet tall.

Leaves: Opposite, pinnately divided into 3-7 segments, each segment up to 4 inches long, up to 2 inches wide, smooth.

Flowers: Many crowded together into a head, tubular and forming a disk, without ray flowers present, each head subtended by 5-8 leafy, ciliate bracts.

Sepals: 0.

Petals: Yellow, united to form a tube, about 1/6 inch long.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes flat, tapering to a narrower base, dark brown to black, smooth or hairy, about 1/3 inch long, with a pair of barbed awns at the upper end.

Notes: The fruits are eaten by ducks. Muskrats will eat the entire plant.

Pennsylvania Bittercress

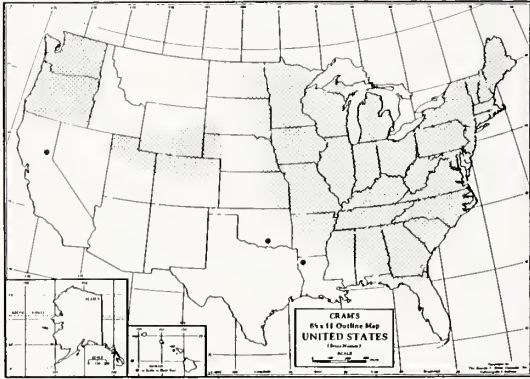
Cardamine pensylvanica Muhl.

Family: Mustard (Brassicaceae)

March-July

Field Marks: This small white-flowered *Cardamine* differs from similar species by its terminal leaflets which are as large as or larger than the lateral leaflets.





Local Notes:



Habitat: Wet woods, along streams.

Habit: Biennial or perennial herbs from a thickened rootstock.

Stems: Erect, smooth or slightly hairy near the base, sometimes branched, up to 15 inches tall.

Leaves: Alternate, pinnately compound with 5-13 leaflets, smooth, the terminal leaflet as large or larger than the lateral leaflets, up to 1/2 inch long, nearly as broad, all leaflets oblong to oval, without teeth, toothed, or sometimes shallowly lobed.

Flowers: Several in terminal racemes, white, 1/6 to 1/4 inch across.

Sepals: 4, green, smooth.

Petals: 4, white, free from each other.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Pods slender, cylindrical, ascending, up to 1 1/4 inches long, with a sterile beak about 1/10 inch long; seeds pale brown.

Notes: The young stems and leaves can be used in salads.

Maryland Senna

Cassia marilandica L.

Family: Caesalpinia (Caesalpiniaceae)

July-August

Field Marks: This *Cassia* differs from other species with large leaflets by its usually short-hairy fruits and its sessile dark gland on the leaf stalk.





Local Notes:



Habitat: Wet meadows, roadside ditches.

Habit: Perennial herbs with a thickened root.

Stems: Upright, branched or unbranched, usually smooth, up to 4 feet tall.

Leaves: Alternate, pinnately compound with 4-10 pairs of leaflets, the leaflets oblong to elliptic, rounded or pointed at the tip, rounded at the base, smooth, up to 2 inches long, up to 1/2 inch wide; leaf stalks bearing a dark, sessile gland near its base.

Flowers: Several, in short, axillary racemes, yellow, up to 1 inch across.

Sepals: 5, united below into a short tube, up to 1/3 inch long.

Petals: 5, free from each other, slightly unequal in size, about 1/2 inch long.

Stamens: 10, but only 7 of them fertile, producing pollen.

Pistils: Ovary superior, hairy.

Fruits: Pods slightly curved, smooth or usually short-hairy, up to 4 inches long, up to 1/2 inch wide; seeds thick.

Spreading Chervil

Chaerophyllum procumbens (L.) Crantz

Family: Carrot (Apiaceae)

April-June

Field Marks: This species is distinguished by its small umbels of white flowers and its fruits that are broadest near the middle.





Local Notes:



Habitat: Along streams, roadside ditches, alluvial fields.

Habit: Annual herb with fibrous roots.

Stems: Spreading to erect, much branched, smooth or somewhat hairy.

Leaves: Alternate, twice-pinnate, smooth or somewhat hairy, the leaflets oblong to ovate.

Flowers: White, borne in small, few-flowered umbels, on very slender, smooth stalks, subtended by small bracts.

Sepals: Minute or seemingly absent.

Petals: 5, free, white, up to 1/12 inch long.

Stamens: 5.

Pistils: Ovary inferior, elongated, usually smooth.

Fruits: Narrowly oblong to elliptic, somewhat flattened, up to 1/2 inch long, about 1/10 inch wide, broadest near the middle, with strong vertical ribs.

Spotted Water Hemlock

Cicuta maculata L.

Family: Carrot (Apiaceae)

June-September

Field Marks: This tall perennial differs from all other similar species by its compound leaves divided into leaflets more than 1/2 inch broad, its large umbels of white flowers, and its smooth fruits.





Local Notes:



Habitat: Swamps, marshes, edge of streams, wet meadows, roadside ditches.

Habit: Coarse perennial with a tuber-like base.

Stems: Erect, branched, hairy, up to 7 feet tall.

Leaves: Alternate, pinnately divided into numerous leaflets, the leaflets linear to broadly lanceolate, pointed at the tip, rounded or tapering to the base, usually sharply toothed, hairy, up to 3 inches long, more than 1/2 inch broad.

Flowers: Many flowers borne in small umbels which, in turn, make up a large umbel up to 4 inches across, white.

Sepals: 5, green, triangular.

Petals: 5, white, free from each other, about 1/10 inch long.

Pistils: Ovary inferior.

Fruits: Nearly spherical, smooth but with prominent, vertical ribs, up to 1/4 inch long.

Notes: All parts of this species are considered to be poisonous to most animals.

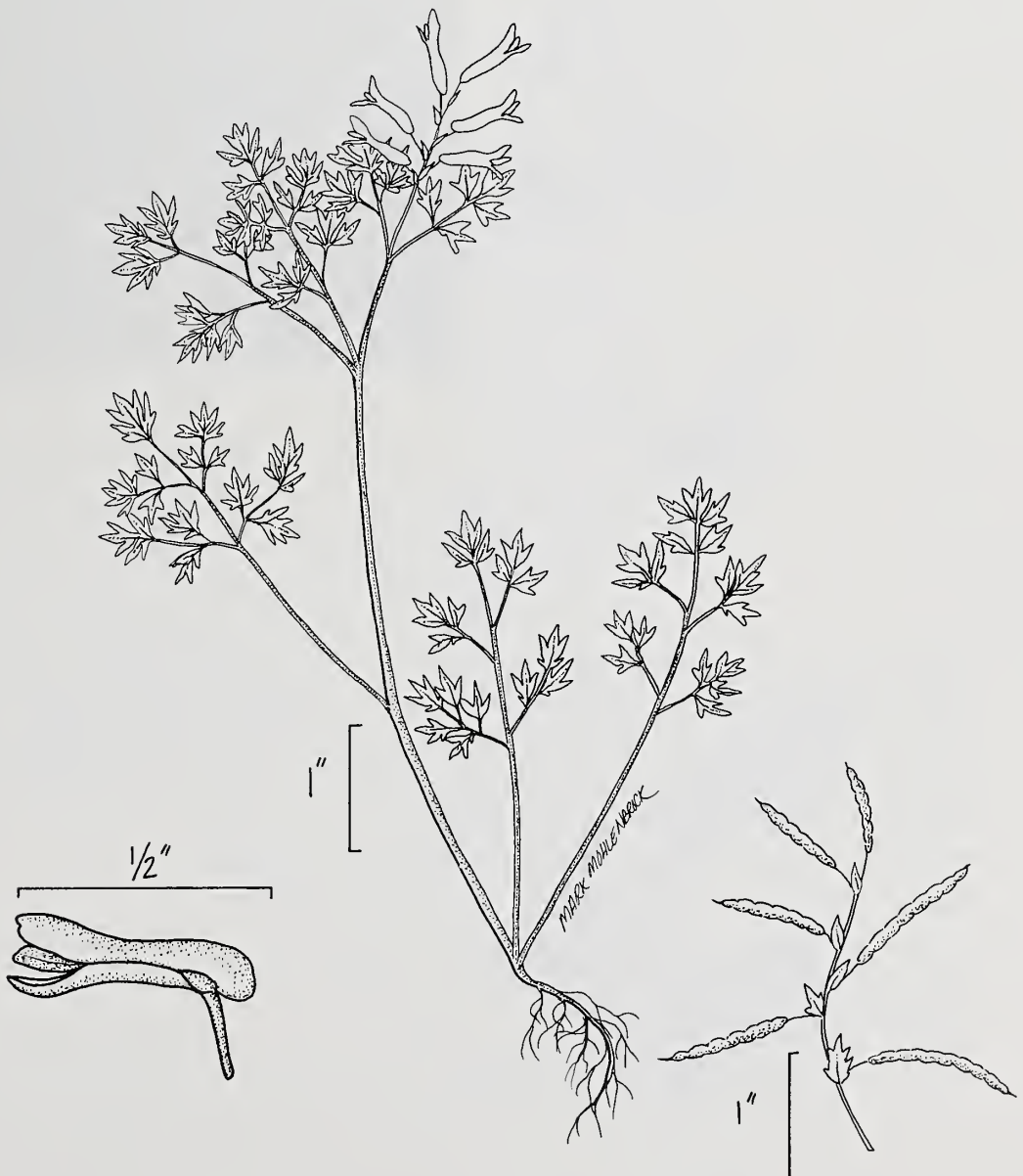
Yellow Corydalis

Corydalis flavula (Raf.) DC.

Family: Poppy (Papaveraceae)

April-May

Field Marks: *Corydalis flavula* is the only species in the genus that has a tiny spur at the base of the corolla that points inward.





Local Notes:



Habitat: Low woods, along streams.

Habit: Annual herb with fibrous roots.

Stems: Spreading to more or less erect, much branched, smooth, slender, up to 10 inches long.

Leaves: Alternate, much divided and almost “fern-like,” gray-green, smooth, the lowermost on long stalks, the uppermost with short or no stalks.

Flowers: Several in racemes, each flower yellow, 1/3-1/4 inch long.

Sepals: 2, green, small, falling off early.

Petals: 4, yellow, one of them protruding at the base into a very short, incurved spur, the inner petals with a toothed ridge down their back.

Stamens: 6, in 2 sets of 3.

Pistils: Ovary superior.

Fruits: Capsules elongated, smooth, up to 1 1/2 inches long, constricted between the seeds.

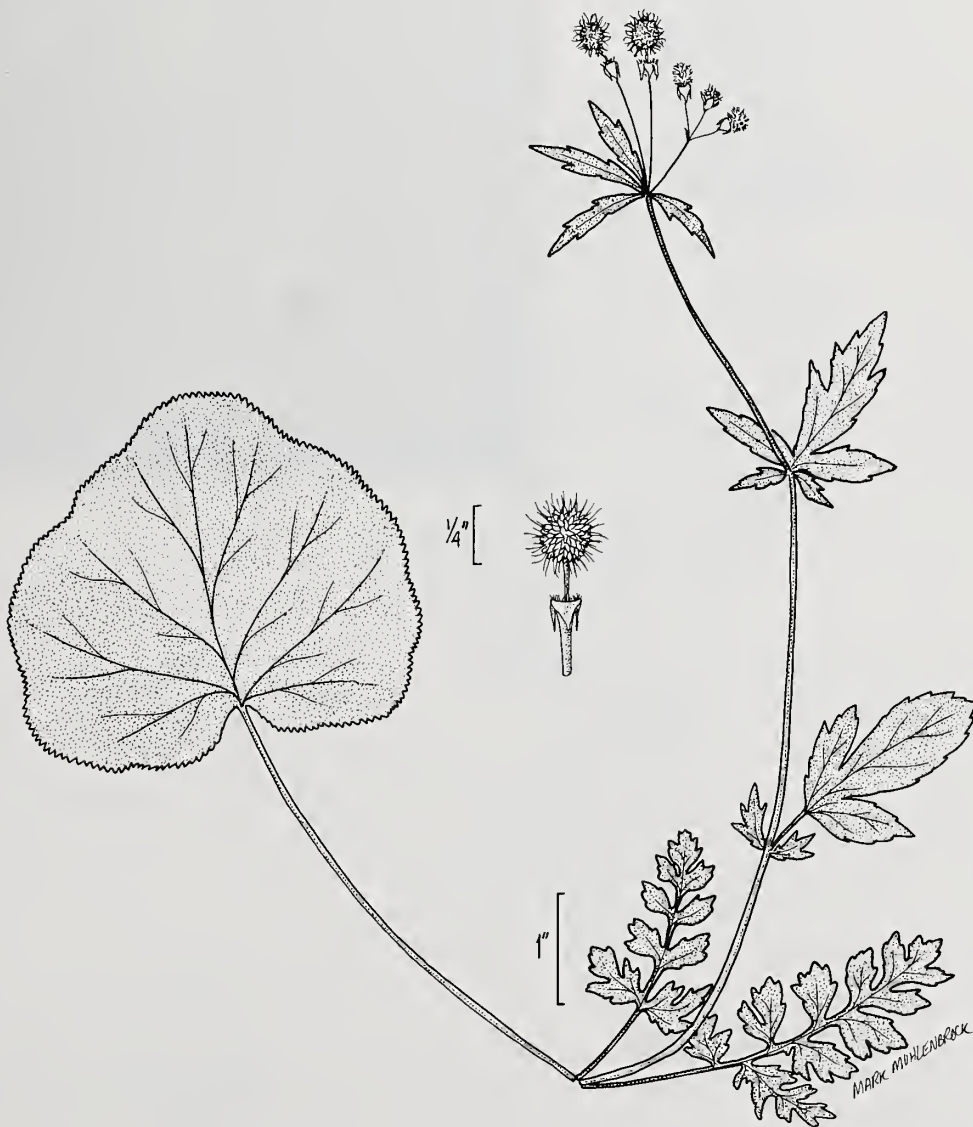
Spring Avens

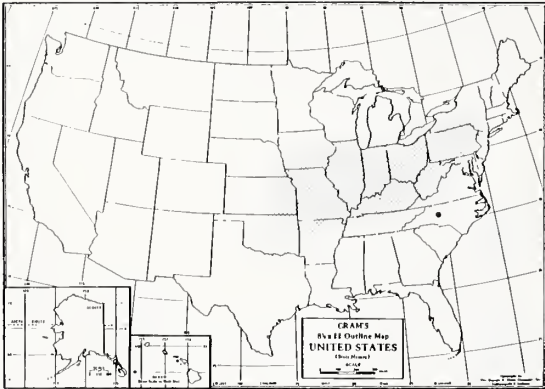
Geum vernum (Raf.) Torr. & Gray

Family: Rose (Rosaceae)

April-May

Field Marks: Species of *Geum* have basal leaves different from the leaves on the stem. Spring avens has yellow flowers, and the bristly fruit is elevated on a stalk.





Local Notes:



Habitat: Wet woods, along streams, damp thickets.

Habit: Perennial herb with rhizomes.

Stems: Spreading to erect, smooth or slightly hairy, up to 1 1/2 feet tall.

Leaves: Basal and alternate, smooth or slightly hairy, toothed, the basal usually only palmately lobed, the leaves on the stem pinnately divided into 3-11 segments.

Flowers: Borne in cymes, yellow, each flower about 1/4 inch across.

Sepals: 5, free from each other, green, about 1/8 inch long.

Petals: 5, free from each other, yellow, shorter than the sepals.

Stamens: 25-35, free.

Pistils: Several, free; ovary superior.

Fruits: A cluster of achenes forming a bristly head 1/4-1/3 inch in diameter, each achene with the persistent hooked style.

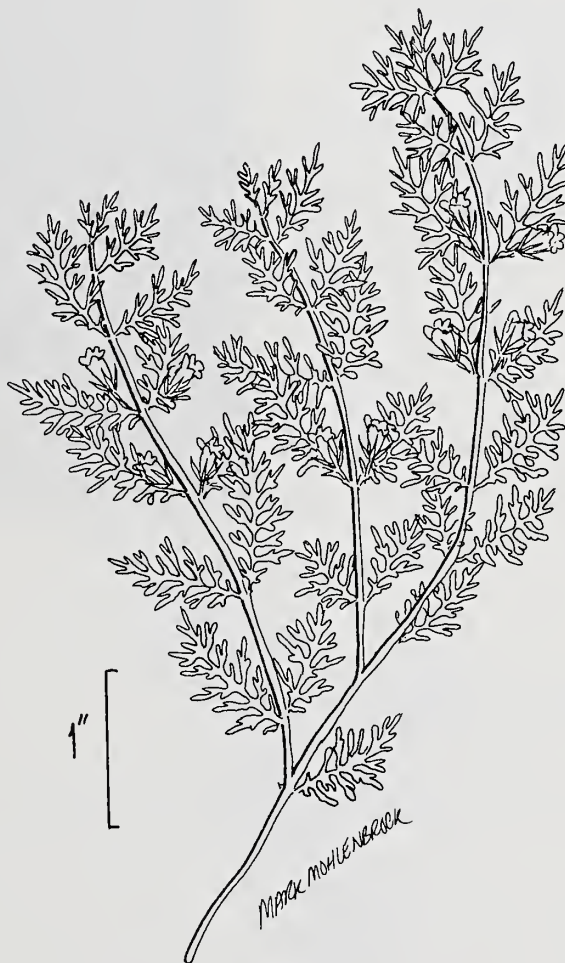
Narrow-leaved Paleseed

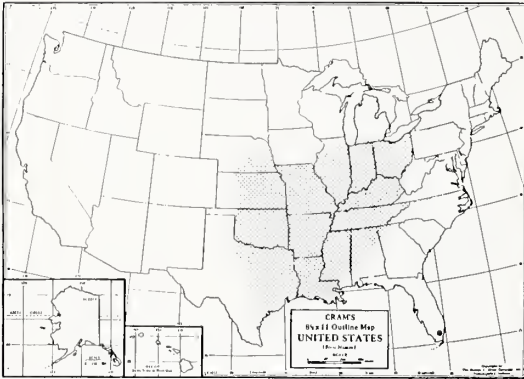
Leucospora multifida (Michx.) Nutt.

Family: Figwort (Scrophulariaceae)

May-October

Field Marks: The tiny, pale blue flowers and the opposite, pinnately divided leaves distinguish this species.





Local Notes:



Habitat: Along streams, wet woods, wet prairies.

Habit: Annual herb with fibrous roots.

Stems: Erect, much branched, up to 8 inches tall, with spreading hairs.

Leaves: Opposite, pinnately divided into 3-7 narrowly oblong segments, hairy, up to 1 1/4 inches long.

Flowers: 1 or 2 in the axils of the leaves, borne on slender stalks longer than the flowers.

Sepals: 5, green, very narrow, united below.

Petals: 5, pale blue, united below, 2-lipped, about 1/3 inch long.

Stamens: 4, not exerted beyond the petals.

Pistils: Ovary superior.

Fruits: Capsules ovoid, containing many seeds.

Birdsfoot Trefoil

Lotus corniculatus L.

Family: Pea (Fabaceae)

May-September

Field Marks: This species differs from all members of the pea family by its 5 leaflets and head-like umbels of bright yellow flowers.





Local Notes:



Habitat: Roadsides, old fields, disturbed soil.

Habit: Perennial herbs.

Stems: Erect or sprawling on the ground, branched, smooth or sparsely hairy, up to 1 1/2 feet long.

Leaves: Alternate, pinnately compound with 5 leaflets, the leaflets elliptic, rounded or pointed at the tip, tapering to the base, without teeth, somewhat hairy, up to 2/3 inch long, up to 1/3 inch wide, without leaflet stalks.

Flowers: Several in head-like umbels, bright yellow, up to 2/3 inch long.

Sepals: 5, green, united into a tube.

Petals: 5, sweet pea-shaped, bright yellow, up to 2/3 inch long.

Stamens: 10.

Pistils: Ovary superior.

Fruits: Pods cylindric, smooth, up to 1 3/4 inches long.

Cowbane
Oxypolis rigidior (L.) Raf.

Family: Carrot (Apiaceae)

July-September

Field Marks: Cowbane differs from other species with large umbels of white flowers by its toothless leaf segments in some leaflets.





Local Notes:



Habitat: Along streams, wet prairies, wet meadows.

Habit: Robust perennial herb with clusters of tuberous roots.

Stems: Erect, usually unbranched, smooth, up to 6 feet tall.

Leaves: Alternate, once pinnate into 7-13 leaflets; the leaflets linear to lanceolate, pointed at the tip, tapering to the base, with or without a few coarse teeth, smooth, up to 5 inches long, up to 2 inches broad, without stalks.

Flowers: Several in an umbel, with several umbels forming a compound umbel, white, each flower about 1/6 inch across.

Sepals: 5, green, minute.

Petals: 5, white, free from each other.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Ellipsoid to oblongoid, flattened, with lateral wings, up to 1/4 inch long.

Notes: Cattle become ill when grazing on this species.

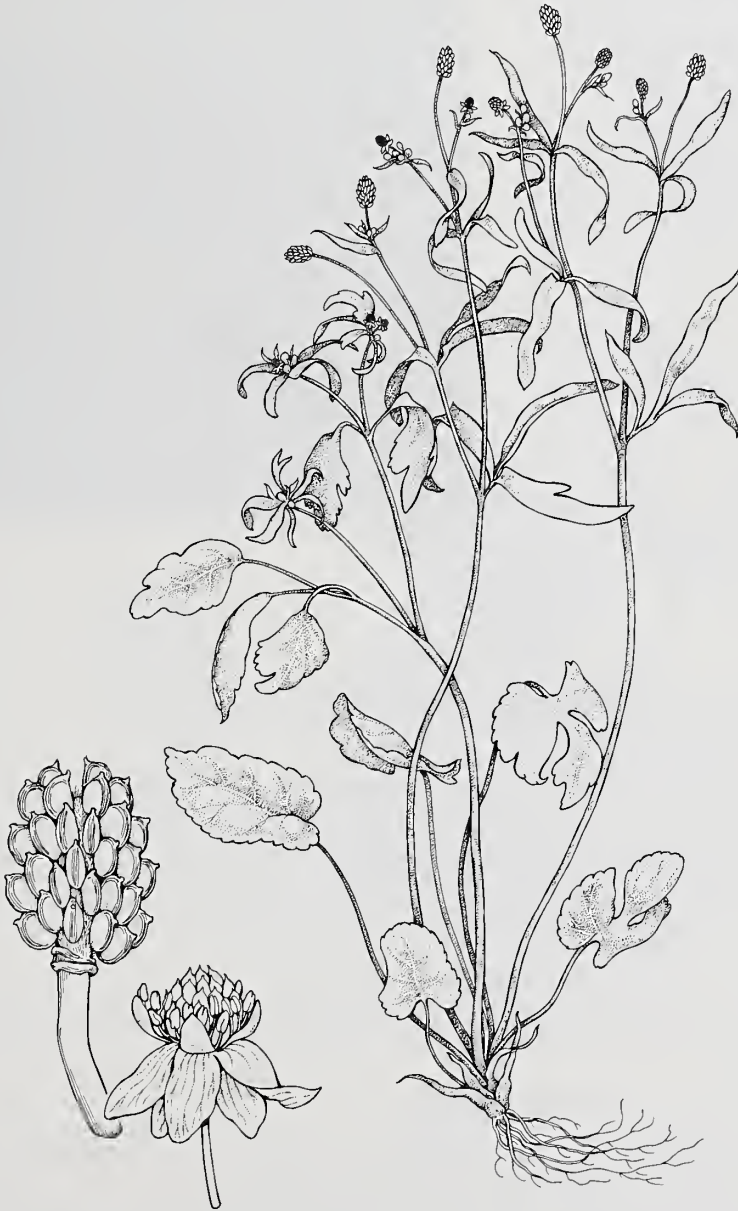
Subalpine Buttercup

Ranunculus abortivus L.

Family: Buttercup (Ranunculaceae)

March-June

Field Marks: This species is distinguished by having its 5 petals equalling or shorter than the sepals, by its shiny achenes, and by its usually smooth stems.





Local Notes:



Habitat: Along streams, low woods, in ditches, and in drier habitats.

Habit: Annual herb with fibrous roots.

Stems: Erect, branched or unbranched, usually smooth, up to 1 1/2 feet tall.

Leaves: Basal and alternate, smooth; the basal ones simple, toothed and sometimes deeply lobed; the leaves on the stem toothed or toothless or divided into 3 or 5 lobes.

Flowers: 1-several at the ends of the branches, yellow, up to 1/2 inch across, subtended by leafy bracts.

Sepals: 5, green, up to 1/4 inch long, pointing downward.

Petals: 5, yellow, free from each other, up to 1/6 inch long, equalling or shorter than the sepals.

Stamens: Numerous.

Pistils: Numerous, free from each other, smooth.

Fruits: Nearly round heads of short-beaked achenes; each achene more or less round in outline, smooth, shiny, 1/10-1/8 inch long, with a minute beak to one side.

Notes: The common name listed for this species is inappropriate. It is usually known as the small-flowered crowfoot. The achenes are eaten by wildlife.

Swamp Buttercup

Ranunculus septentrionalis Poir.

Family: Buttercup (Ranunculaceae)

April-June

Field Marks: This buttercup has waxy yellow petals longer than the sepals, stalked leaflet segments, stems that lie or creep along the ground, and flattened achenes.





Local Notes:



Habitat: Along streams, in damp woods.

Habit: Trailing or ascending perennial herb with fibrous roots.

Stems: Usually trailing or creeping, sometimes ascending, hollow, smooth or sometimes hairy, up to 2 1/2 feet long.

Leaves: Alternate, pinnately divided into usually 3 leaflets; each of these leaflets stalked, usually toothed and sometimes divided again, smooth or less commonly hairy.

Flowers: 1-several, slender stalked, yellow, up to 1 1/2 inches across.

Sepals: 5, green, free from each other, smooth or hairy, up to 1/3 inch long, pointing downward.

Petals: 5, yellow, waxy, free from each other, up to 2/3 inch long, longer than the sepals.

Stamens: Numerous.

Pistils: Numerous, free from each other, smooth.

Fruits: Nearly rounded heads of short-beaked achenes; each achene flattened, up to 1/6 inch long, with a curved beak to one side.

Notes: This is an extremely variable species, easily confused and often intergrading with other large-flowered buttercups.

Butterweed
Senecio glabellus Poir.

Family: Aster (Asteraceae)

April-June

Field Marks: This *Senecio* has all of its leaves pinnately divided into 3-13 segments.





Local Notes:



Habitat: Low woods, swamps, fallow fields.

Habit: Annual herb with fibrous roots.

Stems: Erect, usually smooth, sometimes branched, hollow, up to 3 feet tall.

Leaves: Alternate, deeply pinnately divided into 3-13 segments, each segment usually toothed, smooth; the lower leaves on long stalks; the upper leaves on short stalks, or stalkless.

Flowers: Many crowded into a head, with many heads per plant; each head up to 1 inch across, subtended by small, green bracts; the outer flowers yellow and ray-like; the inner flowers yellow and tubular, forming a disk.

Sepals: 0.

Petals: Some ray-like, yellow; others tubular, yellow, 5-lobed.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes smooth, with a tuft of white hairs at the top.

Waterparsnip

Sium suave Walter

Family: Carrot (Apiaceae)

July -September

Field Marks: This robust perennial is distinguished by its umbels of white flowers and its once-pinnate leaves with toothed leaflets.





Local Notes:



Habitat: Swamps, wet roadside ditches, wet woods, wet prairies.

Habit: Perennial herb with fibrous roots.

Stems: Erect, branched, angular, smooth, hollow, up to 8 feet tall.

Leaves: Alternate, pinnately divided into 11-15 leaflets; the leaflets lanceolate, pointed at the tip, tapering to the base, toothed, smooth, up to 5 inches long, up to 2 inches broad; leaves under water divided into thread-like or linear segments.

Flowers: Many in a compound umbel; each flower white, up to 2/3 inch across.

Sepals: 5, green, very tiny.

Petals: 5, white, free from each other, up to 1/3 inch long.

Stamens: 5.

Pistils: Ovary inferior, smooth.

Fruits: Ellipsoid, with several strong vertical ribs, 1/6 inch long.

GROUP 7

**Dicot Herbs
With Most of the Leaves
Simple and Opposite**

Purple Gerardia

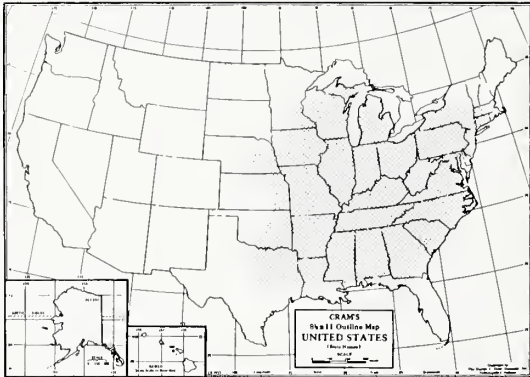
Agalinis purpurea (L.) Raf.

Family: Figwort (Scrophulariaceae)

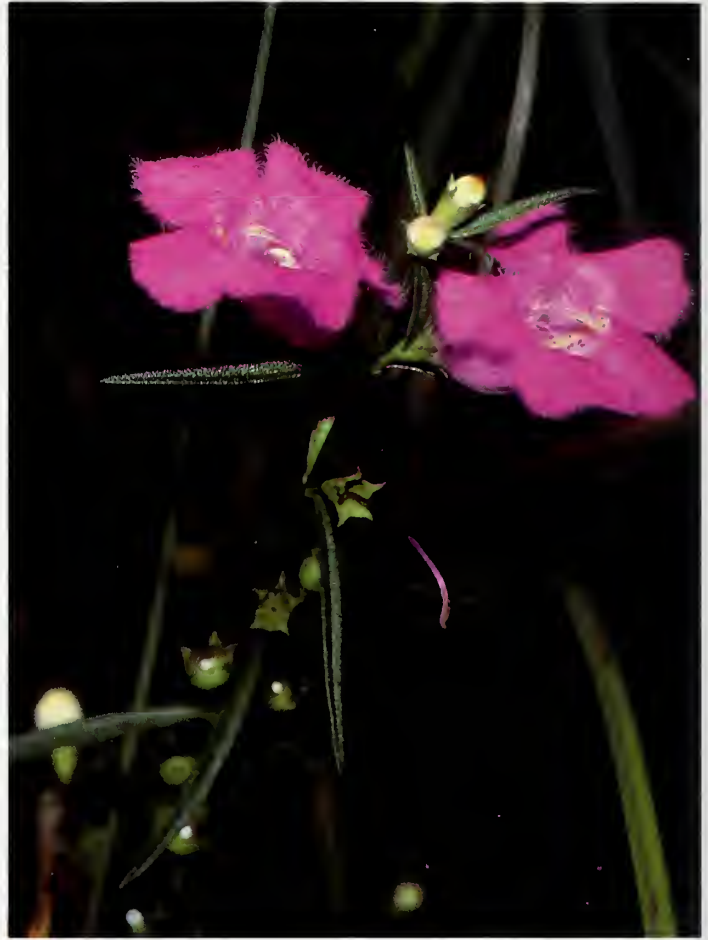
July-October

Field Marks: All species of *Agalinis* have narrow, opposite leaves and showy purple flowers with 5 petals united into an inflated tube. The purple gerardia differs from all others by its very short flower stalks and its slightly rough stems.





Local Notes:



Habitat: Marshes, wet meadows, edges of ponds and lakes, wet woods.

Habit: Annual herb from tufted roots.

Stems: 1-several, erect, slightly rough to the touch, up to 3 feet tall, with many spreading branches.

Leaves: Opposite, simple, linear to linear-lanceolate, pointed at the tip, tapering to the base, somewhat rough on the upper surface, without teeth, up to 1/6 inch wide.

Flowers: Several in the axils of the upper leaves, bright pink-purple, up to 1 1/2 inches long, bilaterally symmetrical.

Sepals: 5, green, united to form a tube 1/6 inch long.

Petals: 5, pink-purple, united below to form a tube up to 1 1/2 inches long.

Stamens: 4, not exserted beyond the corolla tube.

Pistils: Ovary superior.

Fruits: Capsules spherical, about 1/6 inch diameter, with numerous small seeds.

Notes: This showy species grows in a variety of wetland habitats. It is grazed upon by deer.

Common Ragweed

Ambrosia artemisiifolia L.

Family: Aster (Asteraceae)

July-November

Field Marks: Most ragweeds have opposite, coarsely hairy leaves. Male and female flowers are greenish, without petals, and borne in separate heads usually on the same plant. The common ragweed differs from all others by its much divided leaves.





Local Notes:



Habitat: Cultivated fields, fallow fields, roadsides, disturbed areas.

Habit: Coarse annual with fibrous roots.

Stems: Upright, usually much branched, smooth or hairy, up to 7 feet tall.

Leaves: Opposite, up to 8 inches long, divided into many narrow, toothed segments, each segment pointed at the tip, smooth or hairy.

Flowers: Crowded into small green heads in slender, elongated spikes, the heads either sterile or composed of only male or female flowers, but both sexes usually found on the same plant.

Male Flowers: Up to 1/4 inch long, 5-or 6-lobed; stamens 5.

Female Flowers: Borne in ellipsoid heads up to 1/3 inch long, with 4-7 projections; ovary inferior.

Fruits: Nutlets beaked, up to 1/4 inch long, brown, with short, sharp spines.

Notes: The uppermost leaves may sometimes be alternate. The fruits are an important food of the bobwhite quail throughout its range, but cattle have adverse effects after eating the stems and leaves. This species causes hay fever in many people.

Giant Ragweed

Ambrosia trifida L.

Family: Aster (Asteraceae)

July-October

Field Marks: This coarse, rough-hairy plant is recognized by its large, 3-lobed, opposite leaves and its terminal spikes of greenish flowers.





Local Notes:



Habitat: Alluvial soil in fields, along streams, around ponds and lakes, low woods, roadside ditches, disturbed soil.

Habit: Very robust annual with fibrous roots.

Stems: Erect, up to 15 feet tall, much branched, rough-hairy.

Leaves: Opposite, simple, deeply 3- (or 5-) lobed, the lobes toothed, rough-hairy on both sides, up to 10 inches long; leaf stalks hairy.

Flowers: Crowded into small green heads in elongated spikes, the heads either composed of male flowers or female flowers, but both sexes found on the same plant.

Male Flowers: About 1/4 inch across, 5- or 6-lobed; stamens 5.

Female Flowers: Borne in ellipsoid heads up to 1/2 inch long, each with 4-6 sharp spine-like projections; ovary inferior.

Fruits: Nutlets ellipsoid, beaked, black, shiny, 1/4-1/2 inch long.

Notes: This species is a primary cause of hay fever. The leaves are browsed by deer.

Purple Ammannia

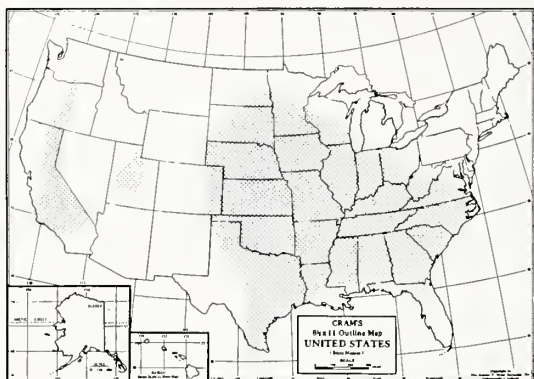
Ammannia coccinea Rottb.

Family: Loosestrife (Lythraceae)

July-September

Field Marks: *Ammannia* has more than one flower in the axils of leaves, while *Rotala*, a very similar genus in the family, has only one flower. Purple ammannia lacks flower stalks and has 4 pink-purple petals less than 1/4 inch long. The leaves are opposite with a pair of shallow lobes at the base.





Local Notes:



Habitat: Wet, open soil, often along the margins of ponds and lakes; wet meadows.

Habit: Annual herb from a tuft of roots.

Stems: Usually solitary, erect, smooth, sometimes branched, usually 4-angled, up to 1 1/2 feet tall, often turning reddish.

Leaves: Opposite, simple, linear to narrowly lanceolate, pointed at the tip, usually with a pair of shallow lobes at the base, without teeth, up to 3 inches long, up to 1/2 inch wide.

Flowers: 2-5 in the axils of the leaves, each about 1/4 inch long, usually without a stalk.

Sepals: 4, very short, forming a small cup.

Petals: 4, pink to pink-purple, up to 1/4 inch long, falling away early.

Stamens: 4 or 8.

Pistils: Ovary superior.

Fruits: Rounded capsules 1/4-1/2 inch in diameter, with minute shiny, yellow seeds.

Notes: The tiny seeds are eaten by waterfowl. This species is sometimes called Tooth-cup.

Indianhemp Dogbane

Apocynum cannabinum L.

Family: Dogbane (Apocynaceae)

June-September

Field Marks: This common species is distinguished by its milky sap, opposite leaves, small white flowers, and pairs of slender fruits.





Local Notes



Habitat: Fields, roadsides, edge of woods, prairies, thickets, in both moist and dry situations.

Habit: Perennial herbs.

Stems: Erect, branched, smooth or hairy, up to 4 1/2 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, rounded or tapering to the base, without teeth, smooth or hairy, up to 6 inches long.

Flowers: Several in terminal cymes, white or greenish white, each flower up to 1/4 inch long.

Sepals: 5, green, very small, free nearly to the base,

Petals: 5, white or greenish white, united below to form a short tube, up to 1/4 inch long.

Stamens: 5, not protruding beyond the petals.

Pistils: Ovaries 2, superior.

Fruits: Pair of slender follicles up to 6 inches long, with seeds bearing a tuft of white hairs.

Notes: This highly variable species grows in a variety of moist and dry habitats. It contains poisonous properties.

Swamp Milkweed

Asclepias incarnata L.

Family: Milkweed (Asclepiadaceae)

July-October

Field Marks: This is the only wetland milkweed with lanceolate opposite leaves, pink or pinkish red hour-glass-shaped flowers, and milky sap.





Local Notes:



Habitat: Swamps, wet ditches, wet prairies, streambanks, marshes.

Habit: Perennial herb.

Stems: Erect, branched, smooth, rarely hairy, with milky sap, up to 5 feet tall.

Leaves: Opposite, simple, lanceolate to oblanceolate, without teeth, pointed at the tip, narrowed or rounded at the base, smooth or hairy on the lower surface, with milky sap, up to 4 inches long, up to 1 inch wide, with short stalks.

Flowers: Several, borne in umbels, pink to pinkish red, hour-glass-shaped, up to 1/3 inch long, borne on smooth stalks.

Sepals: 5, greenish, turned downward.

Petals: 5, pink to pinkish red, associated with a 5-parted central column.

Stamens: 5, associated with the central column.

Pistils: Ovaries 2, superior.

Fruits: Follicles smooth, up to 5 inches long, containing several seeds with silky hairs at one end.

Notes: The leaves, when gathered young, can be cooked and eaten as a vegetable. The roots are eaten by muskrats.

Purple Milkweed

Asclepias purpurascens L.

Family: Milkweed (Asclepiadaceae)

May-July

Field Marks: This is the only milkweed with completely red-purple flowers and stalked leaves.





Local Notes:



Habitat: Along streams, wet meadows; sometimes in drier habitats.

Habit: Perennial herb with rhizomes.

Stems: Erect, usually unbranched, short-hairy, up to 3 feet tall.

Leaves: Opposite, simple, elliptic to oblong, rounded or pointed at the tip, tapering to the base, without teeth, short-hairy on the lower surface, up to 6 inches long, up to 1 1/2 inches broad.

Flowers: Several in umbels, red-purple, hour-glass-shaped, up to 1/2 inch long.

Sepals: 5, green, united at base, turning downward.

Petals: 5, red-purple, united, turning downward, associated with a 5-parted central column.

Stamens: 5.

Pistils: Ovary superior.

Fruits: Follicles hairy, not prickly, up to 5 inches long.

Showy Milkweed
Asclepias speciosa Torr.

Family: Milkweed (Asclepiadaceae)

July-August

Field Marks: This species, with greenish purple petals, is larger than the common milkweed, *Asclepias syriaca*, in all respects.





Local Notes:



Habitat: Wet prairies.

Habit: Stout perennial herb with rhizomes.

Stems: Erect, branched or unbranched, hairy, up to 6 feet tall, with milky sap.

Leaves: Opposite, simple, ovate to ovate-lanceolate to oval, pointed at the tip, tapering or rounded at the base, hairy on the lower surface, up to 6 inches long, up to 3 inches broad, with milky sap.

Flowers: Several in umbels, on hairy stalks, each flower greenish purple, hour-glass-shaped, up to 3/4 inch long.

Sepals: 5, nearly free from each other, green, turned downward.

Petals: 5, greenish purple, turned downward, associated with a 5-parted central column.

Stamens: 5.

Pistils: Ovary superior.

Fruits: Follicles ovoid, white-woolly, with soft spines, up to 5 inches long.

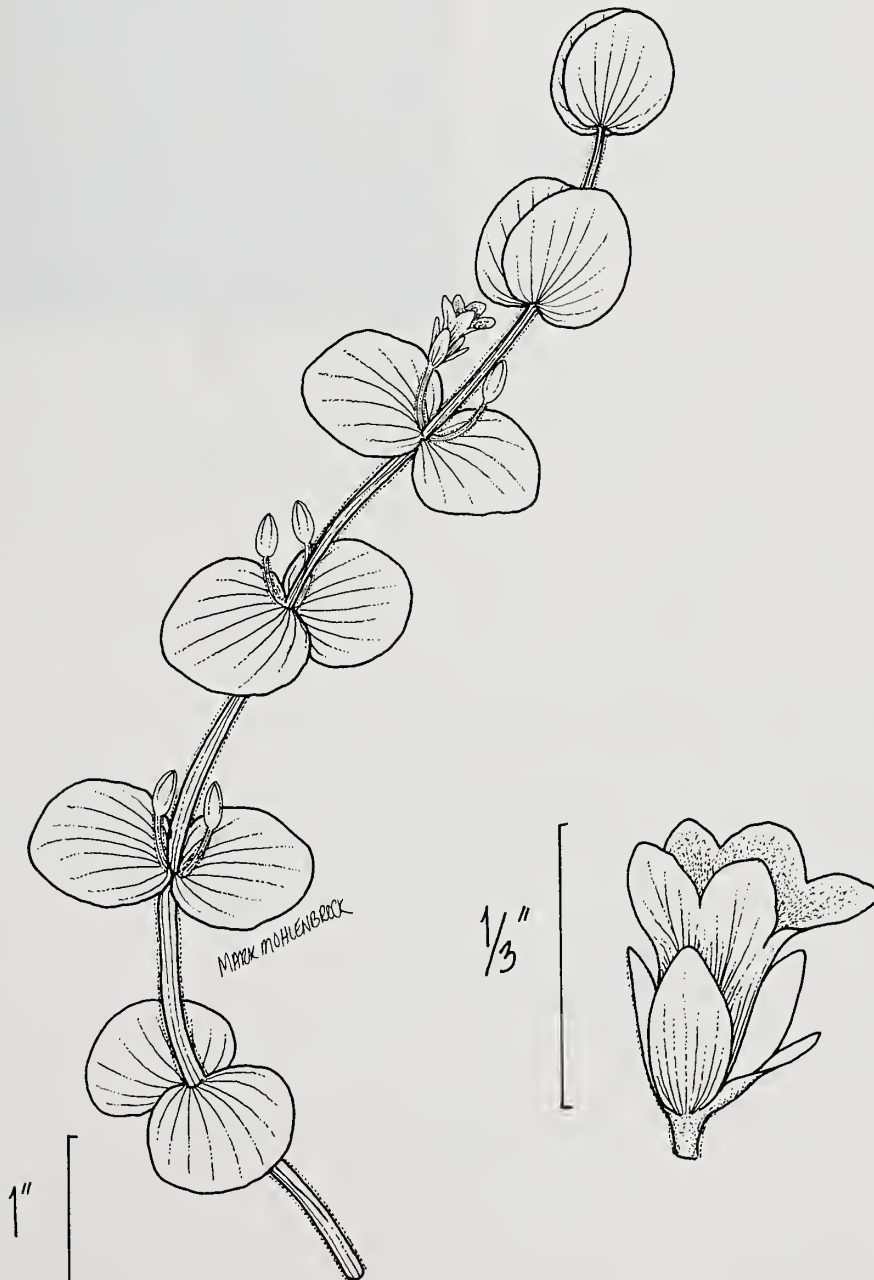
Disk Water Hyssop

Bacopa rotundifolia (Michx.) Wettst.

Family: Figwort (Scrophulariaceae)

May-September

Field Marks: This species, with small bluish flowers, has spherical, toothless leaves.





Local Notes:



Habitat: Around ponds and lakes, along streams, low woods.

Habit: Perennial herb with creeping stolons.

Stems: Creeping or floating if in water, branched or unbranched, usually hairy, up to 2 feet long.

Leaves: Opposite, simple, spherical to obovate, rounded at the tip and at the base, sometimes clasping at the base, usually without teeth, smooth, up to 1 inch long and broad.

Flowers: Blue, 1 or 2 in the axils of the leaves, up to 1/3 inch long.

Sepals: 5, green, united below, asymmetrical.

Petals: 5, bluish, united, 2-lipped, up to 1/3 inch long.

Stamens: 4, shorter than the petals.

Pistils: Ovary superior.

Fruits: Capsules oblongoid, rounded at the tip, up to 1/4 inch long.

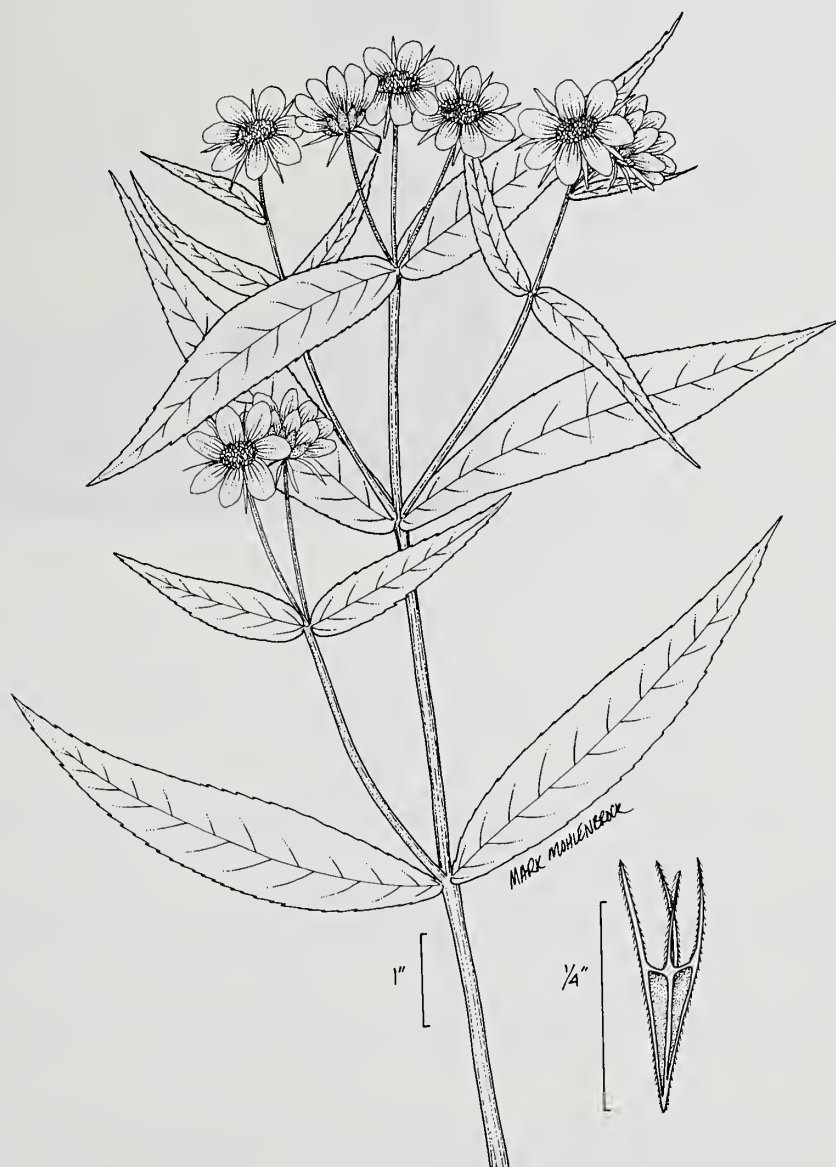
Nodding Beggarsticks
Bidens cernua L.

Bidens cernua L.

Family: Aster (Asteraceae)

August-October

Field Marks: This *Bidens* differs from other species with showy yellow rays by its undivided simple leaves, its nodding heads, and its somewhat winged fruits.





Local Notes:



Habitat: Swamps, wet meadows, roadside ditches, along streams, around ponds and lakes, marshes, bogs.

Habit: Annual herbs with a taproot.

Stems: Erect or sometimes growing along the ground and rooting at the nodes, smooth or hairy, often branched, up to 5 feet tall.

Leaves: Opposite, simple, linear to lanceolate, pointed at the tip, more or less rounded at the sessile or slightly clasping base, smooth or hairy, with or without teeth, up to 6 inches long, up to 1 1/2 inches wide.

Flowers: Many crowded together into a head, the outer yellow and flat, the inner yellow and tubular, forming a disk, with several heads per plant, each head subtended by 5-8 narrow, leafy bracts.

Sepals: 0.

Petals: Some yellow, united to form flat rays up to 2/3 inch long and up to 1/3 inch wide, others yellow, 5-lobed, united below into a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes mostly flat, broadest at top, tapering to a narrow base, green-black, barbed along the edge, up to 1/3 inch long, about 1/10 inch broad, with four stiff barbed awns at the upper end.

Notes: The fruits of this species are eaten by ducks.

False Nettle

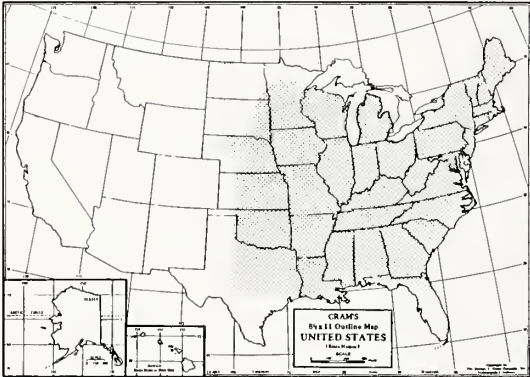
Boehmeria cylindrica (L.) Swartz

Family: Nettle (Urticaceae)

June-October

Field Marks: This nettle is distinguished by its opposite leaves and the absence of stinging hairs.





Local Notes:



Habitat: Wet meadows, low woods, along streams, bogs, marshes.

Habit: Perennial herbs from thickened rootstocks.

Stems: Erect, unbranched, smooth, more or less 4-angled, up to 2 1/2 feet tall.

Leaves: Opposite, simple, ovate to ovate-lanceolate, pointed at the tip, rounded at the base, with 3 main veins, coarsely toothed, smooth, up to 3 inches long.

Flowers: Many tiny flowers crowded into slender spikes borne from the axils of the leaves, the male flowers usually on separate plants from the female flowers, each flower greenish white, about 1/12 inches long.

Sepals: 4, united.

Petals: 0.

Stamens: 4.

Pistils: Ovary superior.

Fruits: Achenes ovoid, narrowly winged, up to 1/10 inch long.

White Turtlehead

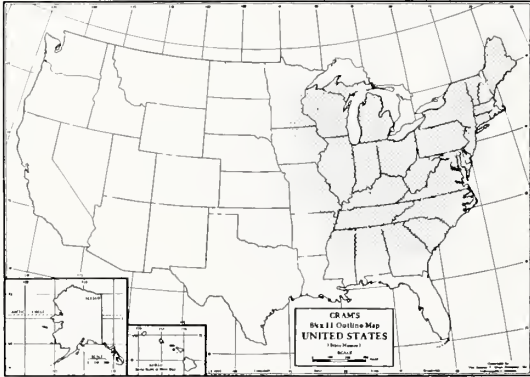
Chelone glabra L.

Family: Figwort (Scrophulariaceae)

July-October

Field Marks: The large, white, nearly closed corolla and the narrow, opposite, toothed leaves distinguish this species.





Local Notes:



Habitat: Swamps, wet meadows, fens, along streams, marshes.

Habit: Perennial herbs with thickened rootstocks.

Stems: Erect, smooth, brached or unbranched, up to 4 1/2 feet tall.

Leaves: Opposite, simple, linear to lanceolate, pointed at the tip, tapering to the base, toothed, smooth, up to 6 inches long, up to 2 inches wide.

Flowers: Crowded into terminal spikes up to 4 inches long, each flower white, up to 1 1/2 inches long.

Sepals: 5, green, free from each other.

Petals: 5, white, united to form a nearly closed, bilaterally symmetrical corolla, up to 1 1/2 inches long.

Stamens: 4.

Pistils: Ovary superior.

Fruits: Capsule nearly spherical, up to 2/3 inch in diameter, with many seeds.

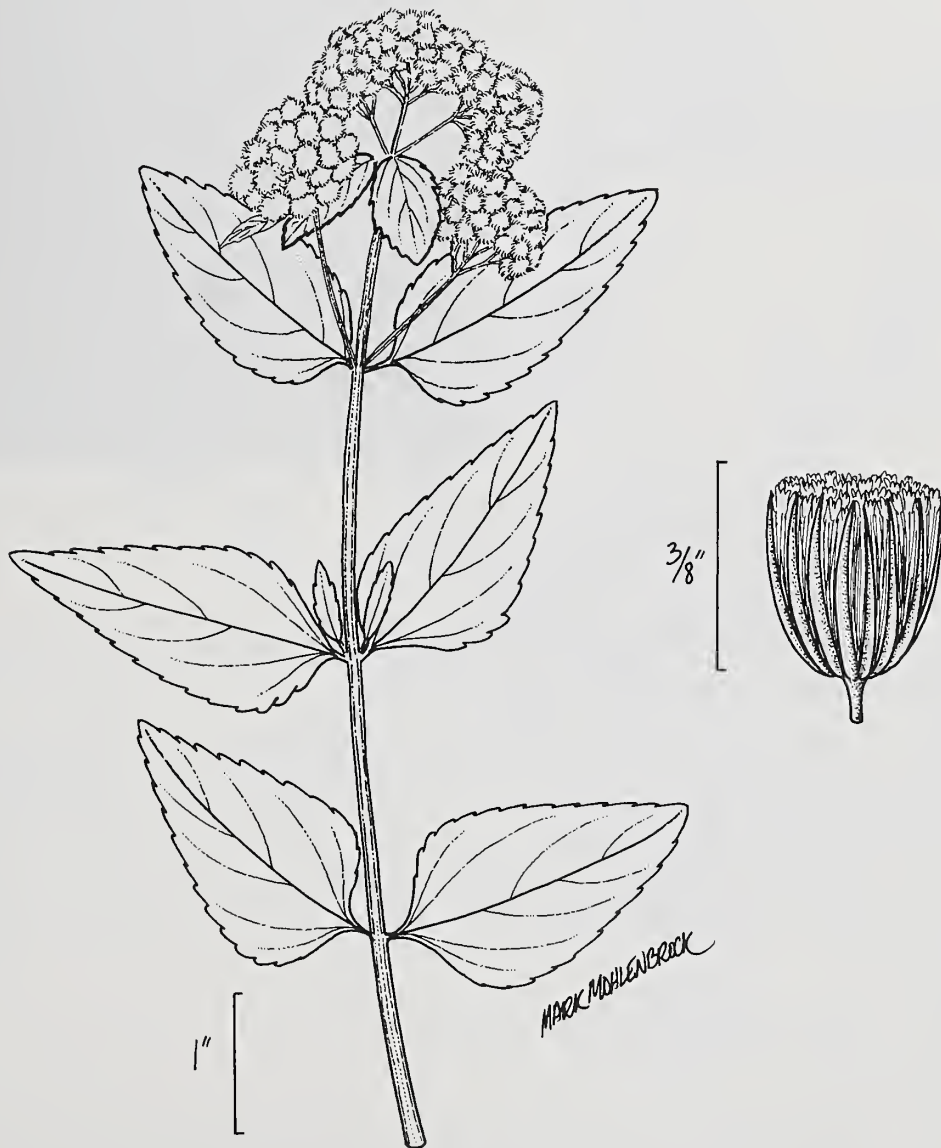
Mistflower

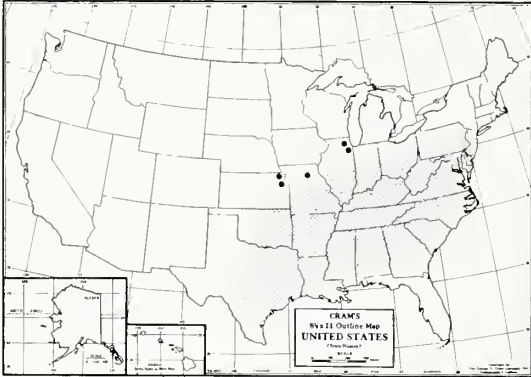
Conoclinium coelestinum (L.) DC.

Family: Aster (Asteraceae)

July-October

Field Marks: This species is distinguished by its many heads of blue or violet flowers and its opposite, generally triangular, toothed leaves.





Local Notes:



Habitat: Low woods, wet ditches, along streams, around lakes and ponds, wet meadows.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, smooth or hairy, branched or unbranched, up to 2 1/2 feet tall.

Leaves: Opposite, simple, ovate to lance-ovate to generally triangular, pointed at the tip, rounded or heart-shaped at the base, usually somewhat hairy, toothed, up to 3 1/2 inches long, up to 2 1/2 inches broad, usually with short stalks.

Flowers: Many crowded into a head, with many heads per plant, each head up to 1/2 inch across and subtended by narrow, pointed, green bracts up to 3/8 inch long, all flowers blue or violet, forming a tube.

Sepals: 0.

Petals: 5, united to form a tube, blue or violet.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes about 1/10 inch long, with several white, thread-like hairs up to 1/4 inch long.

Notes: This species is often known as *Eupatorium coelestinum*. It is sometimes grown as an ornamental.

Virginia Buttonweed

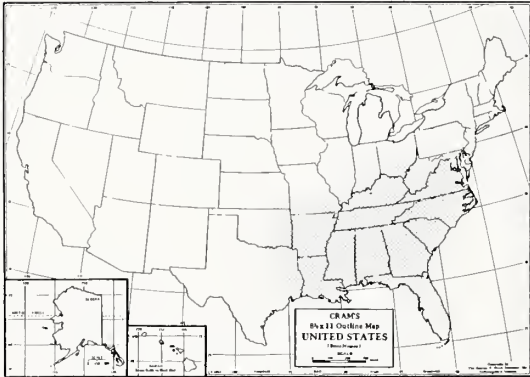
Diodia virginiana L.

Family: Madder (Rubiaceae)

June-September

Field Marks: Members of the genus *Diodia* are recognized by their bristle-like stipules at the base of the leaves and only 1-3 flowers in the axils of the leaves. Virginia buttonweed is further distinguished by having only 2 sepals.





Local Notes:



Habitat: Swamps, low woods, wet meadows, damp fields, along streams, around ponds, marshes, in wet ditches.

Habit: Annual herbs from fibrous roots.

Stems: Spreading or sprawling, much branched, 4-angled, usually smooth or hairy on the angles, up to 2 feet long.

Leaves: Opposite, simple, elliptic to lanceolate, pointed at the tip, tapering to the base, without teeth, smooth, up to 2 inches long, up to 1/2 inch wide.

Flowers: 1-3 in the axils of the leaves, white, about 1/3 inch across.

Sepals: 2, green, united below.

Petals: 4, white, united to form a tube 1/3 inch long, the lobes spreading.

Stamens: 4, attached to the corolla tube and usually just barely protruding above it.

Pistils: Ovary inferior.

Fruits: Leathery, hairy, ellipsoid, 1/4-1/3 inch long, splitting into two 1-seeded segments.

Notes: The fruits of this species are eaten by waterfowl.

Yerba de Tajo

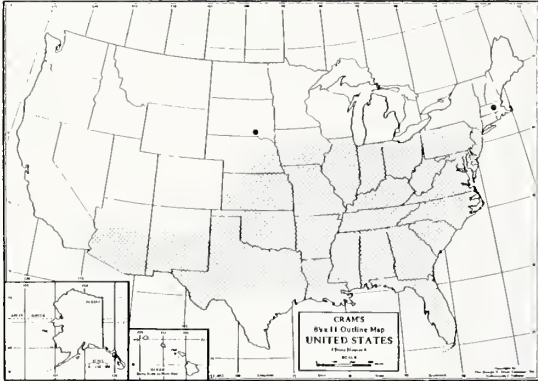
Eclipta alba (L.) Hassk.

Family: Aster (Asteraceae)

June-October

Field Marks: This member of the aster family is distinguished by its opposite leaves and small heads of white flowers containing both ray and disk flowers.





Local Notes:



Habitat: Wet, often disturbed soil; fallow fields, old fields, meadows, marshes, bogs, along streams, around ponds and lakes.

Habit: Erect or spreading annual herb with fibrous roots.

Stems: Erect or spreading, hairy, to 3 feet long, often rooting at the nodes.

Leaves: Opposite, simple, linear-lanceolate to elliptic, pointed at the tip, tapering to the base, with or without a few small teeth, hairy, up to 5 inches long, up to 1 1/4 inches broad; leaf stalks short or absent.

Flowers: Many crowded into a head, each head up to 1/2 inch across and subtended by 10-12 narrow, hairy, green bracts, the outer flowers white and ray-like, the inner white and tubular, forming a disk.

Sepals: 0.

Petals: Some white, short, ray-like, others white, 4-parted, forming a short tube.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes obovoid, brown, hairy at the tip, about 1/10 inch long.

Notes: Recently this plant has been called *E. prostrata* by some.

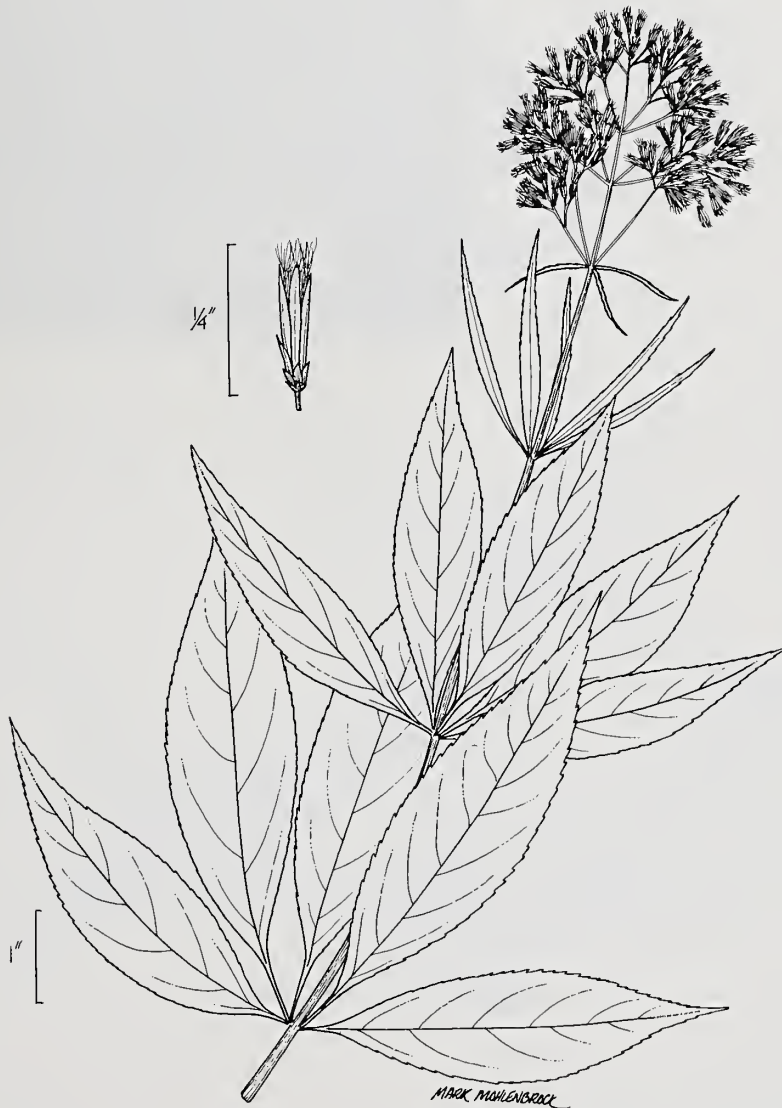
Purplestem Joepyeweed

Eupatoriadelphus fistulosus (Barratt) R. H. King & H. Rob.

Family: Aster (Asteraceae)

July-October

Field Marks: Joepyewees are coarse perennials with whorled leaves. This one differs from all the rest by having hollow, purple stems.





Local Notes:



Habitat: Wet meadows, along streams.

Habit: Coarse perennial herb with fibrous roots.

Stems: Erect, sometimes branched, glaucous, smooth, usually purplish, hollow, up to 8 feet tall.

Leaves: Whorled, simple, lanceolate, pointed at the tip, tapering to the base, toothed, hairy or smooth, up to 9 inches long, up to 3 inches broad.

Flowers: Several crowded in small heads arranged in a large round-topped cluster, each head up to 1/2 inch across and subtended by a few small, ovate bracts, all flowers tubular.

Sepals: 0.

Petals: 5, united to form a tube, pink-purple, 1/6-1/4 inch long.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes 1/6-1/4 inch long.

Notes: This species traditionally has been placed in the genus *Eupatorium*.

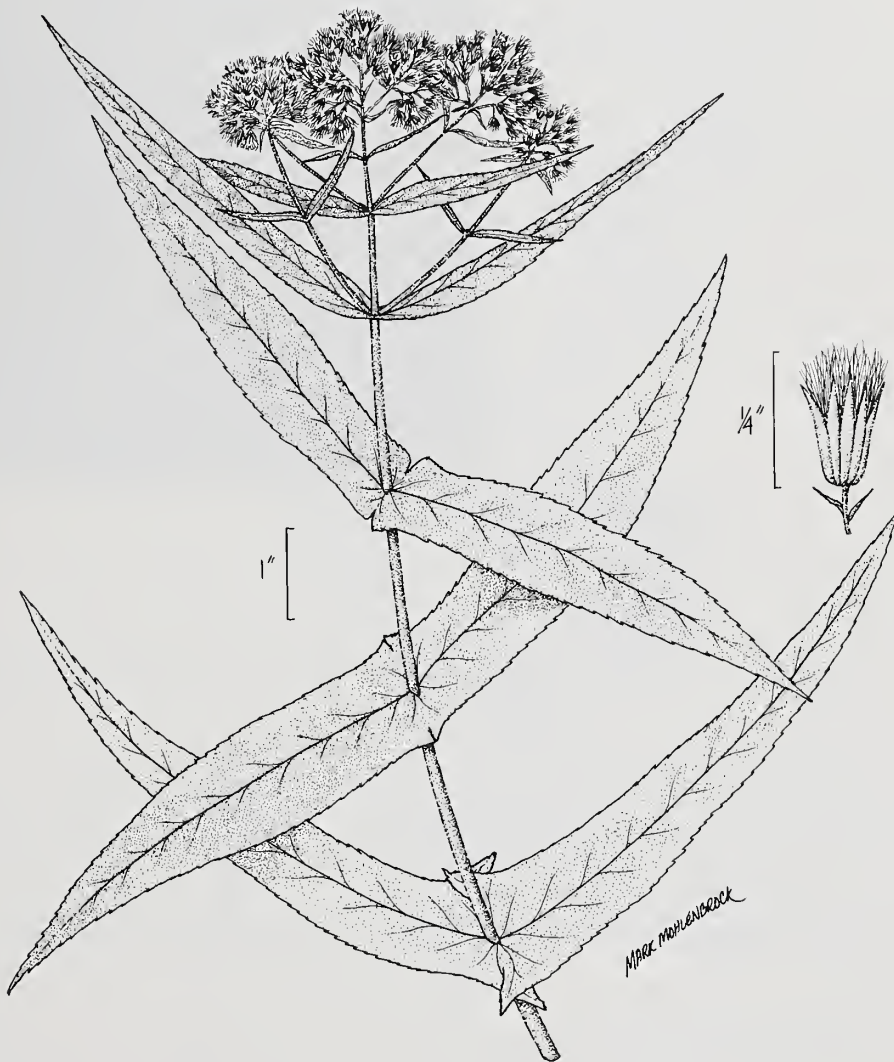
Boneset

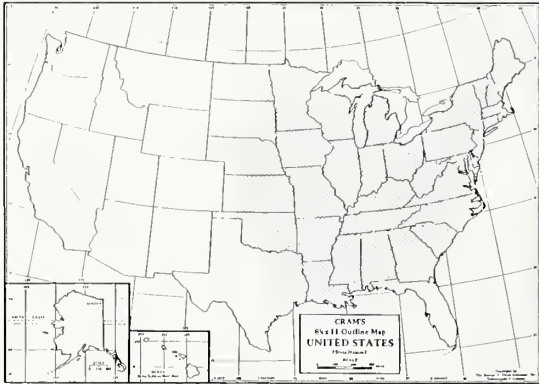
Eupatorium perfoliatum L.

Family: Aster (Asteraceae)

August-October

Field Marks: This is the only *Eupatorium* with strongly connate (clasping) leaves (see illustration).





Local Notes



Habitat: Swamps, wet meadows, wet prairies, around ponds and lakes, along streams, in sloughs.

Habit: Perennial herb, sometimes with rhizomes.

Stems: Erect, usually branched, white-hairy, up to 5 feet tall.

Leaves: Opposite, simple, lanceolate, pointed at the tip, strongly connate at the base, toothed, white-hairy, up to 6 inches long, up to 2 inches broad.

Flowers: Several crowded into small white heads, with many heads forming a much branched inflorescence, each head 1/6-1/4 inch across, subtended by several narrow, green, hairy bracts, all flowers tubular.

Sepals: 0.

Petals: 5, united into a tube, white.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes 1/10 inch long, with a tuft of white bristles.

Notes: The achenes of this species are eaten by waterfowl.

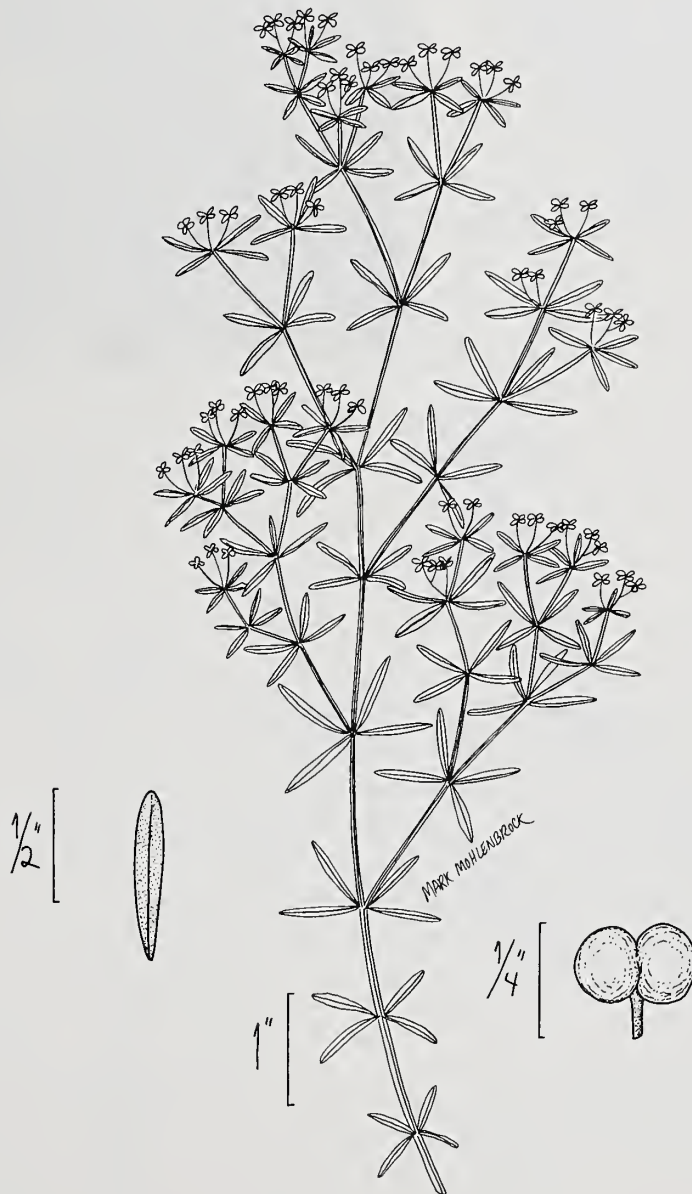
Bluntleaf Bedstraw

Galium obtusum Bigel.

Family: Madder (Rubiaceae)

May-July

Field Marks: This bedstraw is characterized by its 1-veined leaves in whorls of 4 and its tiny white flowers.





Local Notes:



Habitat: Swamps, wet prairies, low woods, roadside ditches.

Habit: Perennial herb with fibrous roots.

Stems: Matted or erect, smooth or rough-hairy, 4-sided, up to 2 feet long.

Leaves: In whorls of 4, simple, linear to lanceolate, rounded at the tip, tapering to the base, rough to the touch, up to 1 1/2 inches long, up to 1/3 inch broad.

Flowers: 2-4 in short, terminal clusters, white, up to 1/4 inch broad.

Sepals: Minute, not differentiated into lobes.

Petals: 4, white, united.

Stamens: 4.

Pistils: Ovary inferior, smooth.

Fruits: Dry, spherical, smooth, 1-seeded.

Dye Bedstraw

Galium tinctorium L.

Family: Madder (Rubiaceae)

May-September

Field Marks: This is the only slender-leaved bedstraw that has leaves in whorls of 5 or 6, often on the same plant.





Local Notes:



Habitat: Swamps, wet meadows, wet woods, roadside ditches.

Habit: Perennial herb with fibrous roots.

Stems: Spreading, often matted, much branched, somewhat rough to the touch, up to 1 1/2 feet long.

Leaves: Simple, in whorls of 5 or 6, linear to oblanceolate, rounded at the tip, tapering to the base, smooth except on the veins and the margin, up to 1 inch long.

Flowers: White, often in clusters of 3, with many clusters at the ends of the branches.

Sepals: Reduced to a small green cup without lobes.

Petals: 3-4, rarely 5, white, united below.

Stamens: 3-4, rarely 5.

Pistils: Ovary inferior.

Fruits: Borne in pairs, smooth, black at maturity, about 1/16 inch in diameter.

Small Bedstraw

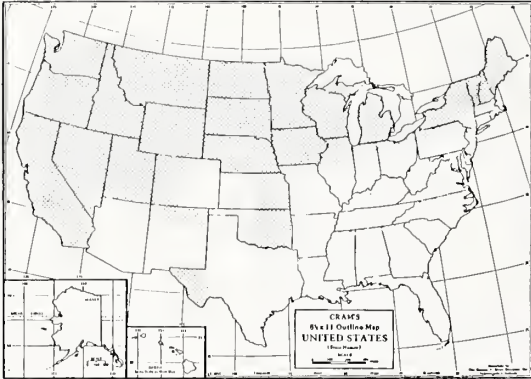
Galium trifidum L.

Family: Madder (Rubiaceae)

May-July

Field Marks: The leaves of this bedstraw are in whorls of 4, the stems and leaves are rough to the touch, the flowers usually have 3 petals, and the fruits are smooth.





Local Notes:



Habitat: Swamps, wet prairies, roadside ditches, wet meadows.

Habit: Perennial herb, often forming mats.

Stems: Much branched, spreading or ascending, rough to the touch, up to 4 feet long.

Leaves: In whorls of 4, simple, linear or narrowly elliptic, rounded at the tip, tapering to the base, rough on the margins and on the veins, up to 3/4 inch long.

Flowers: White, several, borne in cymes, on long, slender stalks; each flower up to 1/12 inch across.

Sepals: Not divided into distinct segments.

Petals: 3, united below, white.

Stamens: Usually 3.

Pistils: Ovary inferior, smooth.

Fruits: Borne in pairs, spherical, smooth, up to 1/10 inch in diameter.

Fringed Gentian

Gentianopsis crinita (Froel.) Ma

Family: Gentian (Gentianaceae)

August-October

Field Marks: All gentians have opposite, toothless leaves and symmetrical flowers with petals united below. Fringed gentian differs from all other gentians by its 4 densely fringed petals.





Local Notes:



Habitat: Marshes, sand flats, wet meadows, low woods.

Habit: Annual herb with fibrous roots.

Stems: 1-several, erect, usually branched, smooth, up to 2 1/2 feet tall.

Leaves: Opposite, simple, lanceolate to lance-ovate, pointed at the tip, rounded at the base, smooth, without teeth, sessile, up to 2 inches long.

Flowers: Solitary in the axils of the uppermost leaves, bright blue, up to 2 1/2 inches long on a smooth stalk up to 6 inches long.

Sepals: 4, green, up to 1 1/2 inches long, united below into a tube.

Petals: 4, bright blue, densely fringed across the top, up to 2 1/2 inches long, united below into a tube.

Stamens: 4, attached to the corolla tube, not protruding above the tube.

Pistils: Ovary superior.

Fruits: Capsules ellipsoid, up to 1 1/2 inches long, with brown seeds.

Clammy Hedge-hyssop

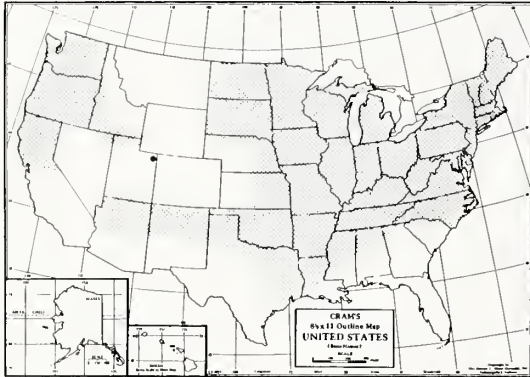
Gratiola neglecta Torr.

Family: Figwort (Scrophulariaceae)

May-October

Field Marks: The distinguishing features of the hedge-hyssops are the low growth form, the opposite leaves, and the small flowers with 2 tiny bracts near the calyx, and 2 stamens. The clammy hedge-hyssop differs from other hedge-hyssops by its tapering leaf bases and slender flower stalks at least 1/2 inch long.





Local Notes:



Habitat: Wet woods, roadside ditches, marshes, along streams, ponds, and lakes, wet fields.

Habit: Annual herbs with fibrous roots.

Stems: Erect or spreading, branched or unbranched, hairy, less than 1 foot long.

Leaves: Opposite, simple, lanceolate to oblanceolate, short-pointed at the tip, tapering to the base, somewhat hairy, up to 1 1/2 inches long.

Flowers: Solitary in the axils of the leaves, white or yellowish, up to 1/2 inch long, on slender stalks at least 1/2 inch long.

Sepals: 5, free or nearly so, green.

Petals: 5, united below into a yellowish tube, the lobes white.

Stamens: 2.

Pistils: Ovary superior.

Fruits: Capsules ovoid, up to 1/4 inch long, containing many seeds.

Sawtooth Sunflower

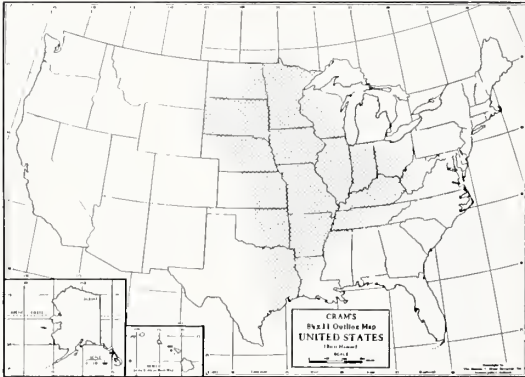
Helianthus grosseserratus M. Martens

Family: Aster (Asteraceae)

July-October

Field Marks: This sunflower usually has several leaves alternate and usually at least 20 leaves per stem.





Local Notes:



Habitat: Wet meadows, along streams, around ponds; also in drier habitats.

Habit: Perennial herb with extensive rhizomes.

Stems: Erect, branched or unbranched, smooth and glaucous except for short hairs near the flowers, up to 12 feet tall.

Leaves: Alternate or opposite, simple, lanceolate, pointed at the tip, tapering to the base, with or without teeth, usually somewhat hairy, up to 8 inches long, up to 2 inches broad.

Flowers: Several crowded together into a head, with several heads per plant; each head up to 3 inches across, subtended by very narrow, pointed bracts, with 10-20 yellow rays and a central yellow disk.

Sepals: 0.

Petals: Some united to form yellow rays, others united to form yellow tubular flowers in a central disk.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes usually short-hairy.

Notes: Martin and Hutchins in *A Flora of New Mexico* (1981) note that specimens from New Mexico called *H. grosseserratus* are actually *H. nuttallii*.

Rough Sumpweed

Iva annua L.

Family: Aster (Asteraceae)

July-October

Field Marks: Species of *Iva* differ from species of *Ambrosia*, the ragweeds, by having all the flowers the same as opposed to ragweeds that have pollen-producing flowers in elongated spikes and pistil-producing flowers in short clusters in the axils of the leaves. Rough sumpweed differs from other species in the genus by its rough-hairy leaves.





Local Notes:



Habitat: Fallow fields, along streams, around ponds and lakes, wet meadows, wet prairies, roadsides.

Habit: Annual herb with fibrous roots.

Stems: Erect, branched, hairy, up to 6 feet tall.

Leaves: Opposite, simple, ovate, pointed at the tip, tapering to the base or truncate, toothed, hairy, up to 5 inches long, up to 3 1/2 inches broad.

Flowers: Many in small heads, with several heads arranged in a group of crowded racemes up to 6 inches long, each head up to 1/6 inch long, subtended by narrow bracts.

Sepals: 0.

Petals: 5, united below into short tubes, cream-colored.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes dark brown, somewhat triangular, flattened, about 1/10 inch long.

Dwarf Dandelion

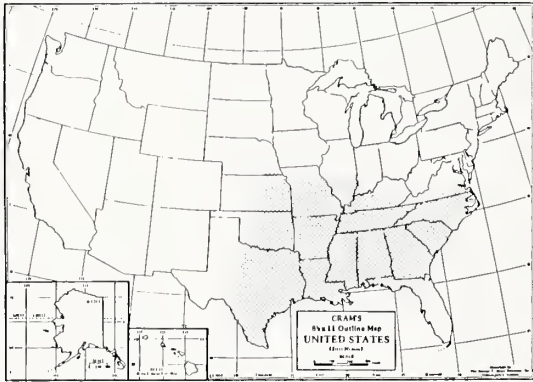
Krigia cespitosa (Raf.) K. Chamb.

Family: Aster (Asteraceae)

April-June

Field Marks: This is the only dandelion-like plant that has opposite leaves. It also lacks the silky bristles on the achenes.





Local Notes:



Habitat: Fallow fields, along streams, wet meadows.

Habit: Annual herb with fibrous roots.

Stems: Erect, smooth, sometimes bluish, up to 15 inches tall; latex present.

Leaves: Basal and opposite, linear to oblong, without teeth or with occasional lobes, pointed at the tip, tapering to the base, smooth, up to 6 inches long, less than 1 inch broad; latex present.

Flowers: Several borne in heads; the heads yellow or yellow-orange, up to 1 inch across, subtended by 5-8 smooth, lanceolate bracts.

Sepals: 0.

Petals: United to form yellow or yellow-orange rays up to 1/2 inch long.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes red-brown, minutely spiny, up to 1/16 inch long, without a tuft of silky hairs at the tip.

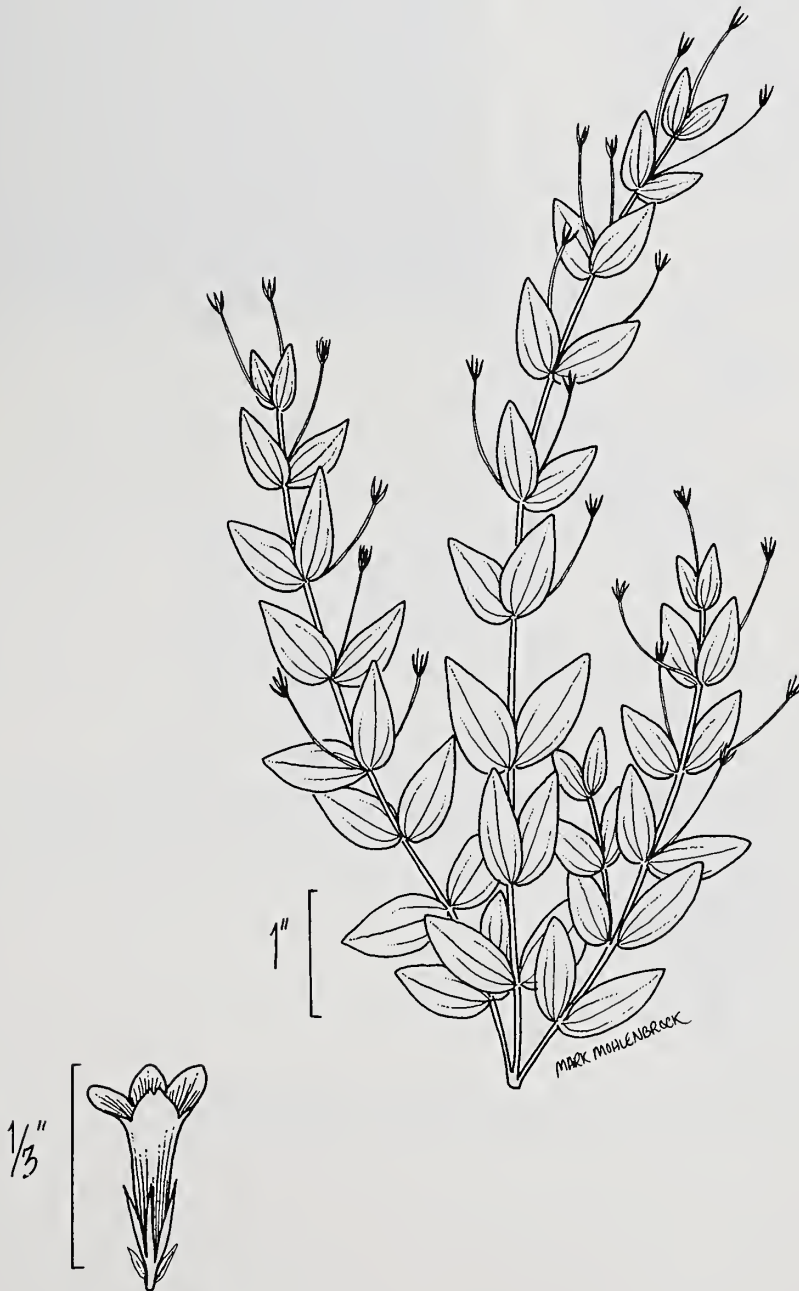
False Pimpernel

Lindernia anagallidea (Michx.) Pennell

Family: Figwort (Scrophulariaceae)

May-October

Field Marks: *Lindernia* differs from *Gratiola* by having a pair of small leaf-like bracts just below the sepals. It is distinguished from *Lindernia dubia* by having flowers on stalks longer than the subtending leaves.





Local Notes:



Habitat: Along streams, around ponds and lakes, roadside ditches.

Habit: Annual herb with fibrous roots.

Stems: Erect or spreading, branched, 4-sided, smooth, up to 8 inches tall.

Leaves: Opposite, simple, elliptic to ovate, pointed or rounded at the tip, rounded or tapering to the sessile base, with or without teeth, smooth, up to 1 inch long, up to 1/3 inch broad.

Flowers: Solitary in the axils of the upper leaves, white or pale lavender on slender stalks as long as or longer than the subtending leaves.

Sepals: 5, green, free from each other.

Petals: 5, united into 2 lips, white or pale lavender.

Stamens: 2.

Pistils: Ovary superior.

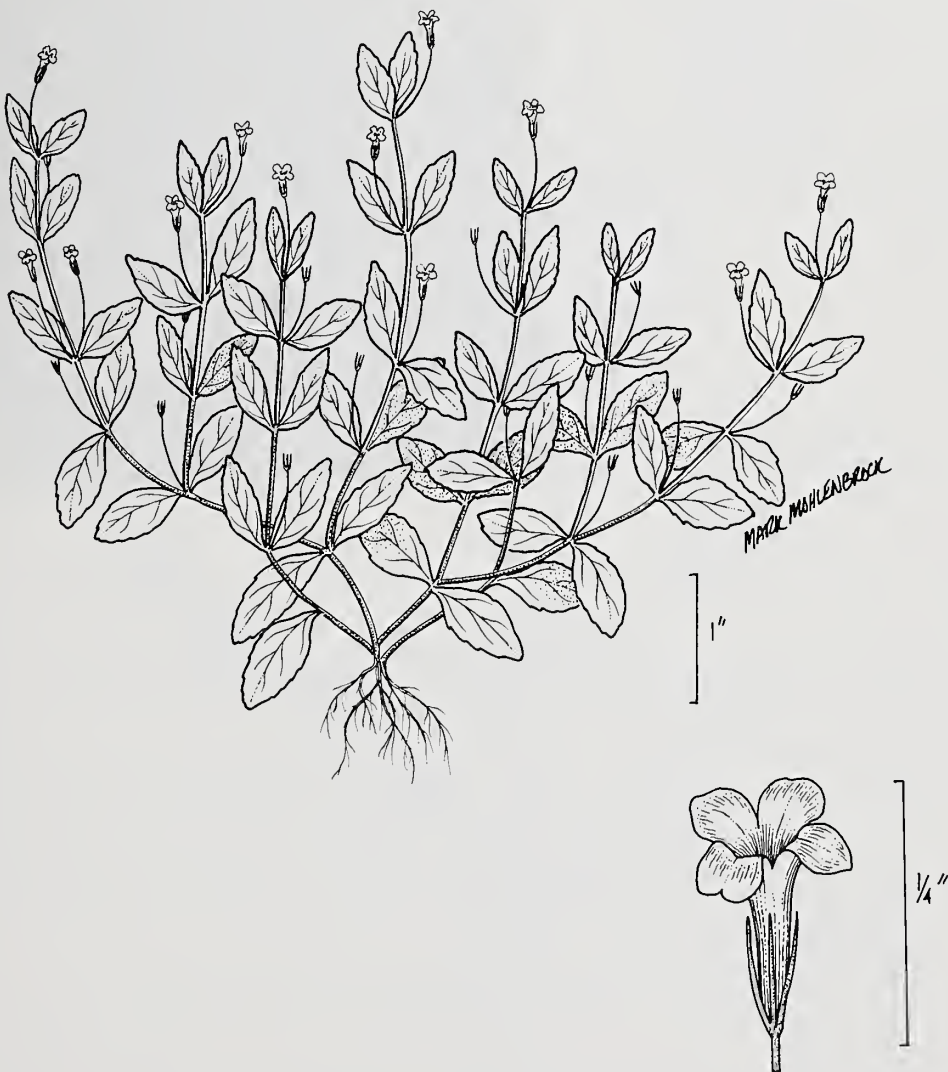
Fruits: Capsules ellipsoid, up to 1/6 inch long, with a persistent style.

Moistbank Pimpernel
Lindernia dubia (L.) Pennell

Family: Figwort (Scrophulariaceae)

June-October

Field Marks: The genus *Lindernia* differs from the similar genus *Gratiola* by lacking the pair of tiny bracts near the calyx. The moistbank pimpernel differs from other *Lindernias* by the stalks of the lowermost flowers shorter than their subtending leaves.





Local Notes:



Habitat: Wet ditches, along streams, around ponds and lakes, marshes, low woods.

Habit: Erect or sprawling annual herbs with fibrous roots.

Stems: Mostly spreading, much branched, up to 10 inches long.

Leaves: Opposite, simple, oblanceolate to elliptic, more or less pointed at the tip, tapering to the base, with or without a few teeth, smooth, up to 1 inch long.

Flowers: Solitary in the axils of the leaves, white to pale lavender, the lowermost flower stalks shorter than their subtending leaves.

Sepals: 5, green, free or nearly so.

Petals: 5, somewhat 2-lipped, white to pale lavender, less than 1/2 inch long.

Stamens: 4, only 2 of them fertile.

Pistils: Ovary superior.

Fruits: Capsules ovoid, smooth, 1/4-1/5 inch long, with many seeds.

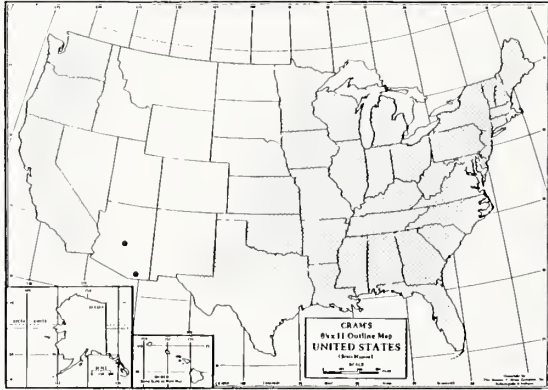
Marsh Purslane
Ludwigia palustris (L.) Elliott

Family: Evening Primrose (Onagraceae)

May-September

Field Marks: This is a prostrate, smooth *Ludwigia*, sometimes rooting at the nodes, and with opposite leaves and tiny axillary flowers without petals.





Local Notes:



Habitat: In mud along streams, around ponds and lakes, in roadside ditches, in sloughs, in swamps; sometimes in shallow water.

Habit: Annual herb with fibrous roots.

Stems: Floating in water or lying flat on the ground, smooth, up to 1 1/2 feet long.

Leaves: Opposite, simple, lanceolate to lance-ovate, pointed or rounded at the tip, tapering to the base, without teeth, smooth, up to 1 1/4 inches long.

Flowers: Solitary in the axils of the leaves, green, up to 1/6 inch long, without a stalk.

Sepals: 4, green, united below to form a cup.

Petals: 0.

Stamens: 4.

Pistils: Ovary inferior.

Fruits: Capsules 4-sided, longer than broad, up to 1/6 inch long, containing many seeds.

Notes: The stems are eaten by muskrats.

American Bugleweed

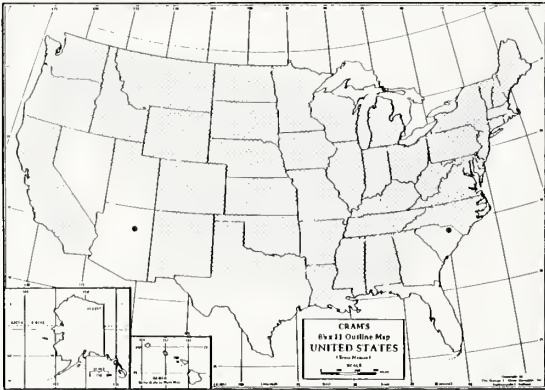
Lycopus americanus Muhl.

Family: Mint (Lamiaceae)

July-October

Field Marks: Species of *Lycopus* have axillary clusters of tiny white flowers. The American bugleweed differs from other species in the genus by its long, sharp-pointed sepals and its coarsely toothed or deeply pinnate leaves.





Local Notes:



Habitat: Low woods, wet meadows, wet roadside ditches, along streams, around ponds and lakes, in sloughs.

Habit: Perennial herb without tuberous roots.

Stems: Erect, unbranched, smooth, 4-sided, up to 1 foot tall.

Leaves: Opposite, simple, lanceolate to lance-linear, usually coarsely toothed or even pinnately divided, smooth, up to 3 1/2 inches long.

Flowers: Several crowded in the axils of the leaves, white, about 1/8 inch long.

Sepals: 5, green, united below, narrowly triangular, with a sharp-pointed tip.

Petals: Apparently 4, white, united below to form a short tube.

Stamens: 2.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets about 1/12 inch long.

Notes: The nutlets are eaten by waterfowl.

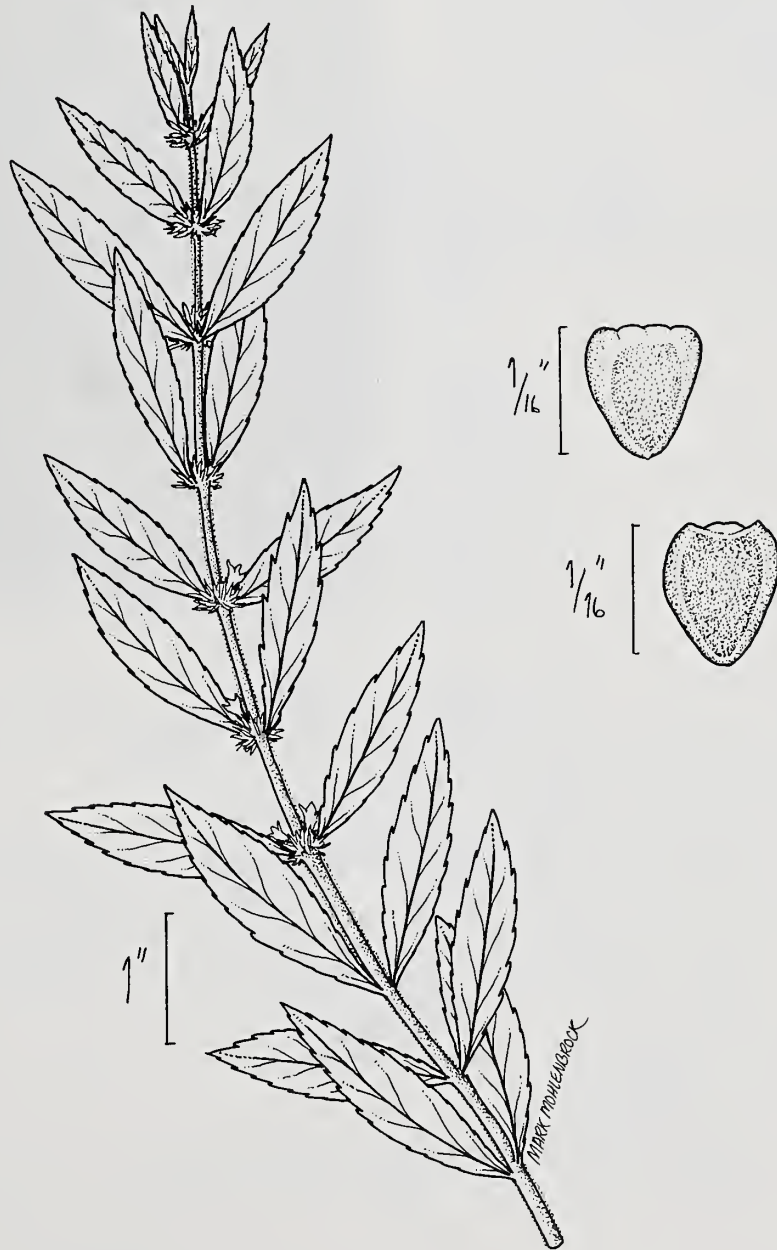
Rough Bugleweed

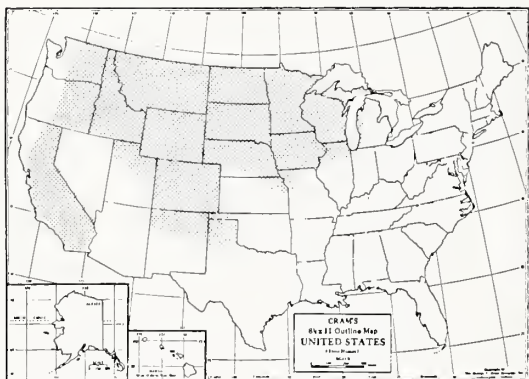
Lycopus asper Greene

Family: Mint (Lamiaceae)

July-August

Field Marks: This *Lycopus* is distinguished by its toothed leaves which have no stalks and its long-pointed calyx lobes.





Local Notes:



Habitat: Low woods, marshes, wet shores.

Habit: Perennial herb with thickened tubers.

Stems: Erect, usually unbranched, hairy, up to 2 feet tall.

Leaves: Opposite, simple, lanceolate to oblong, pointed at the tip, tapering to the base, toothed, hairy, up to 3 inches long, without stalks.

Flowers: Several in clusters in the axils of the leaves, white, without a stalk.

Sepals: 4, green, united, hairy, the lobes long-pointed.

Petals: 4, white, united, up to 1/6 inch long.

Stamens: 2, attached to the corolla, not exserted.

Pistils: Ovary superior, 4-parted.

Fruits: 4 nutlets, warty at the tip, less than 1/10 inch long.

Notes: The thickened tubers are a source of food for muskrats.

Stalked Water Horehound

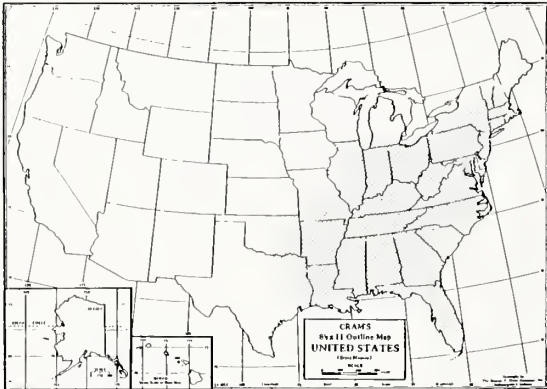
Lycopus rubellus Moench

Family: Mint (Lamiaceae)

July-September

Field Marks: The distinguishing characters of this *Lycopus* are the sharp-pointed sepals and the unlobed leaves with small teeth.





Local Notes:



Habitat: Low woods, swamps, in sloughs, along streams, around ponds and lakes.

Habit: Perennial herb with tuberous roots.

Stems: Erect, unbranched, smooth, 4-sided, up to 1 foot tall.

Leaves: Opposite, simple, lanceolate to elliptic, toothed, not lobed, smooth, up to 3 inches long.

Flowers: Several crowded in the axils of the leaves, white, up to 1/4 inch long.

Sepals: 5, green, united below, the lobes sharp-pointed, about 1/10 inch long.

Petals: Apparently 4, white, united below to form a short tube.

Stamens: 2.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets about 1/12 inch long.

Notes: The fleshy roots are eaten by muskrats, the nutlets are eaten by waterfowl.

Virginia Bugleweed

Lycopus virginicus L.

Family: Mint (Lamiaceae)

July-October

Field Marks: This *Lycopus* differs from all others by its toothed, sessile or short-stalked leaves and its broadly triangular sepals about 1/20 inch long.





Local Notes:



Habitat: Wet woods, along streams, wet meadows, roadside ditches.

Habit: Perennial herb with slender stolons and occasional tuberous swellings.

Stems: Erect, smooth or minutely hairy, up to 1 foot tall.

Leaves: Opposite, simple, lanceolate to elliptic, pointed at the tip, tapering to the sessile or short-stalked base, coarsely toothed, minutely hairy, up to 5 inches long, up to 2 inches broad.

Flowers: Several crowded in the axils of the leaves, white.

Sepals: 5, green, united below, the broad lobes triangular, about 1/10 inch long.

Petals: 4, white, united below, up to 1/8 inch long.

Stamens: 2, not protruding above the petals.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets 4, longer than the sepals, up to 1/10 inch long.

Notes: The nutlets are eaten by waterfowl.

Fringed Loosestrife

Lysimachia ciliata L.

Family: Primrose (Primulaceae)

May-July

Field Marks: This species is distinguished by its leaves that are rounded or heart-shaped at the base and by its ciliate leaf stalks.





Local Notes:



Habitat: Low woods, along streams, around ponds, damp thickets, wet prairies.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, branched or unbranched, usually smooth, up to 3 feet tall.

Leaves: Opposite, simple, ovate to ovate-lanceolate, pointed at the tip, rounded or heart-shaped at the base, without teeth, usually smooth, up to 4 1/2 inches long, up to 1 1/2 inches broad; leaf stalks conspicuously ciliate.

Flowers: Several on long stalks from the axils of the uppermost leaves, yellow.

Sepals: 5, green, nearly free from each other, lanceolate, up to 2/5 inch long.

Petals: 5, yellow, short-pointed at the tip, nearly free from each other, up to 3/5 inch long.

Stamens: 5, not attached to the petals.

Pistils: Ovary superior, smooth.

Fruits: Capsules up to 1/2 inch long, smooth.

Lanceleaf Loosestrife

Lysimachia lanceolata Walter

Family: Primrose (Primulaceae)

May-August

Field Marks: This loosestrife is recognized by its linear-lanceolate or lanceolate leaves and its elongated stolons.





Local Notes:



Habitat: Wet woods, wet prairies, along rivers, around lakes and ponds, swamps.

Habit: Perennial herb with creeping stolons.

Stems: Erect, often branched, smooth, up to 2 feet tall.

Leaves: Opposite, simple, the middle and upper ones linear-lanceolate to lanceolate, more or less pointed at the tip, tapering to a short-ciliate base, without teeth, ciliate along the edges, usually roughened on the lower surface, up to 4 inches long, up to 1/2 inch broad.

Flowers: Yellow, on slender stalks from the axils of the uppermost leaves.

Sepals: 5, green, free from each other, up to 1/3 inch long.

Petals: 5, yellow, attached only at the base, up to 1/2 inch long, minutely toothed.

Stamens: 5.

Pistils: Ovary superior.

Fruits: Capsules nearly spherical, smooth, with many seeds.

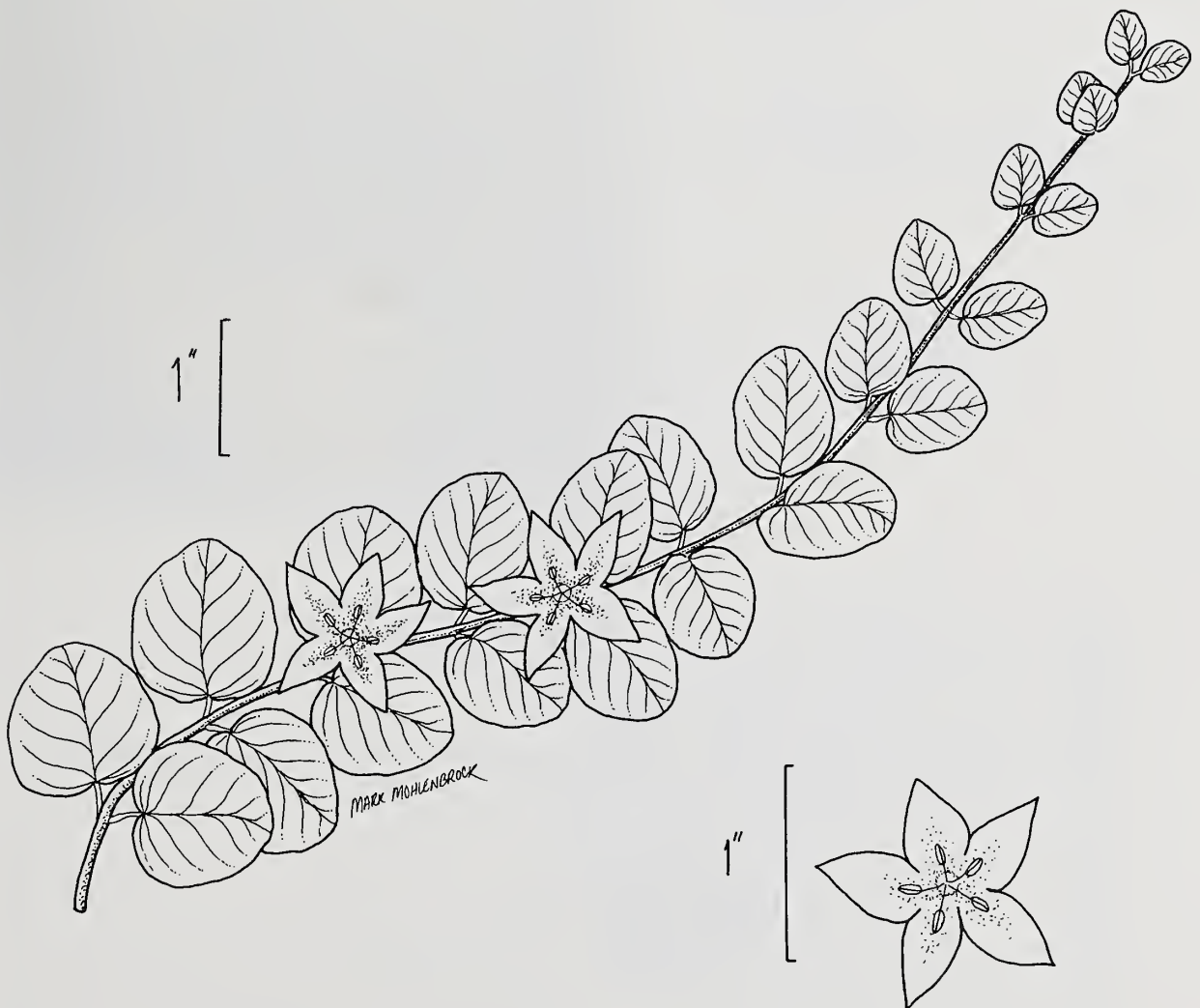
Moneywort Loosestrife

Lysimachia nummularia L.

Family: Primrose (Primulaceae)

May-August

Field Marks: This species creeps along the ground and has nearly spherical, opposite leaves.





Local Notes:



Habitat: Wet soil along streams, around ponds, and in roadside ditches.

Habit: Perennial herb, rooting at the nodes.

Stems: Creeping, smooth, up to 2 feet long.

Leaves: Opposite, simple, spherical to ovate, rounded at each end, smooth, sometimes evergreen, up to 1 1/2 inches long, usually as broad.

Flowers: Solitary in the axils of the leaves, yellow, up to 1 inch across.

Sepals: 5, green, united at base, up to 1/3 inch long.

Petals: 5, yellow, usually black-speckled, united at base.

Stamens: 5, united into a tube.

Pistils: Ovary superior.

Fruits: Usually not formed.

Water Loosestrife

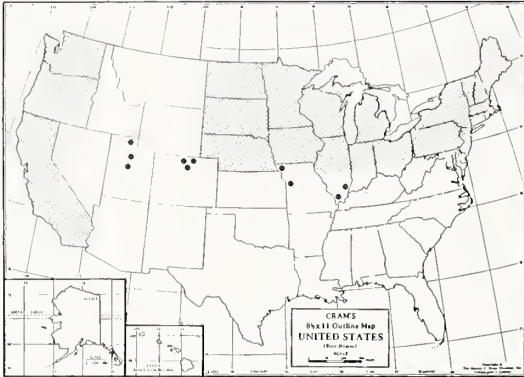
Lysimachia thyrsiflora L.

Family: Primrose (Primulaceae)

May-July

Field Marks: This loosestrife lacks cilia near the base of the leaves. There are small leaves at the base of the normal leaves. The flowers and fruits are borne in short clusters.





Local Notes:

Habitat: Swamps, wet prairies.

Habit: Perennial herb with slender rootstocks.

Stems: Erect, usually unbranched, smooth, up to 2 feet tall.

Leaves: Opposite, simple, elliptic to lanceolate, pointed at the tip, tapering to the base, without teeth, smooth, up to 4 inches long, less than 1 inch broad.

Flowers: Several in small, axillary, spike-like clusters up to 1 1/2 inches long; each flower yellow, to 1/4 inch across.

Sepals: 6, green, very narrow, united at base.

Petals: 6, yellow, black-spotted, very narrow, united only at the base, up to 1/4 inch long.

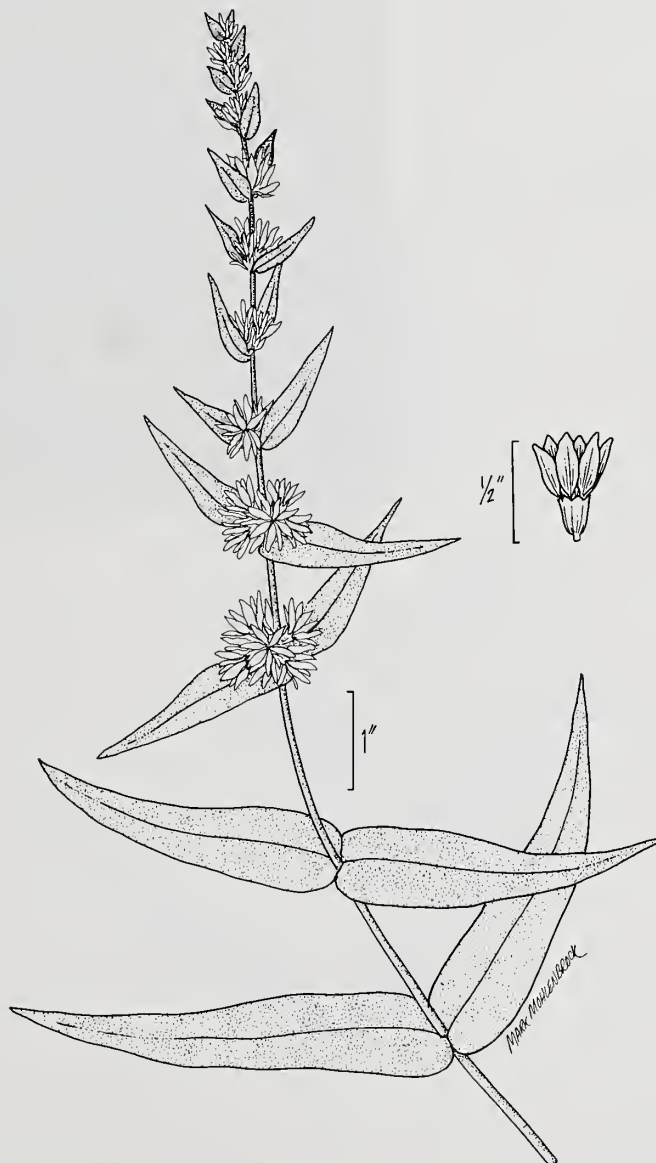
Stamens: 6.

Pistils: Ovary superior.

Fruits: Capsules spherical, black-dotted, up to 1/4 inch in diameter.

Lythrum salicaria L.

Field Marks: This tall, coarse perennial is distinguished by its densely flowered terminal purple spikes, its flowers with 6 free petals, its opposite hairy leaves, and its hairy stems.





Local Notes:

Habitat: Marshes, margins of ponds, lakes, rivers, and streams.

Habit: Coarse perennial from a thickened rootstock.

Stems: 1-several, erect, branched or unbranched, usually hairy, up to 3 1/2 feet tall.

Leaves: Opposite or sometimes in whorls of 3, simple, linear to lanceolate to oblong, pointed at the tip, rounded at the sessile base, without teeth, usually hairy, the largest up to 4 inches long.

Flowers: Crowded in terminal spikes up to 15 inches long, purple, the flowers subtended by green, leafy bracts.

Sepals: Usually 6, green, united below to form a tube that is usually shorter than the petals, usually somewhat hairy.

Petals: Usually 6, purple, free from each other, up to 1/2 inch long.

Stamens: Usually 6.

Pistils: Ovary superior.

Fruits: Capsules slightly longer than broad, containing numerous minute seeds.

Notes: This species, a native of Europe, has become a very aggressive invader of wetlands, eventually choking out much of the native vegetation.

Field Mint

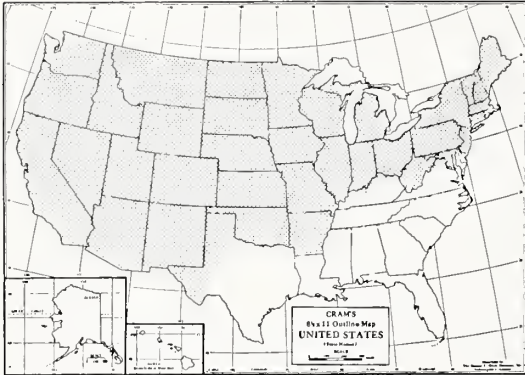
Mentha arvensis L.

Family: Mint (Lamiaceae)

July-September

Field Marks: This mint is distinguished by its hairy sepals and its small flowers in the axils of the leaves.





Local Notes:

Habitat: Along streams, wet woods, around ponds.

Habit: Perennial herb with rhizomes.

Stems: Erect, branched or unbranched, usually with downward-pointing hairs, up to 2 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, rounded or pointed at the tip, rounded or tapering to the base, toothed, hairy, up to 3 inches long.

Flowers: Borne in clusters in the axils of the leaves, purplish, up to 1/3 inch long.

Sepals: 4, green, united to form a cup or short tube, hairy, the lobes more or less equal.

Petals: 4, purplish, united to form a tube.

Stamens: 4, surpassing the corolla and attached to it.

Pistils: Ovary superior, 4-parted.

Fruits: 4 nutlets, longer than the calyx lobes, about 1/10 inch long.

Notes: The minty leaves can be made into a tea.

Sharp-winged Monkey-flower

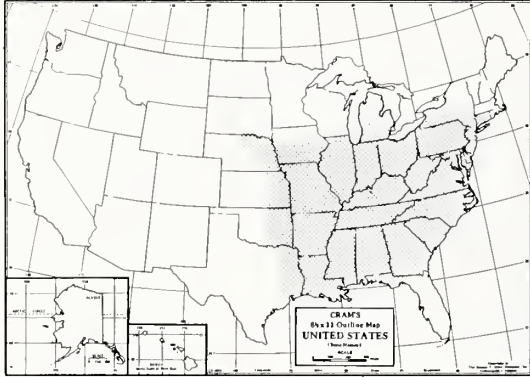
Mimulus alatus Ait.

Family: Figwort (Scrophulariaceae)

June-September

Field Marks: This species is recognized by its blue-violet flowers, winged, 4-sided stems, and leaves with distinct stalks.





Local Notes:

Habitat: Low woods, swamps, marshes, along streams, around lakes and ponds.

Habit: Perennial herbs with slender rhizomes.

Stems: Erect, branched or unbranched, 4-angled and winged, smooth, up to 4 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, tapering to the base, toothed, smooth, up to 4 inches long, up to 2 inches wide.

Flowers: Solitary in the axils of the leaves, violet-purple, up to 1 inch long, on stalks.

Sepals: 5, green, united below.

Petals: 5, 2-lipped, united below into a tube, violet-purple.

Stamens: 4, attached to the corolla tube.

Pistils: Ovary superior.

Fruits: Capsules ellipsoid, up to 1/2 inch long, containing many yellow seeds.

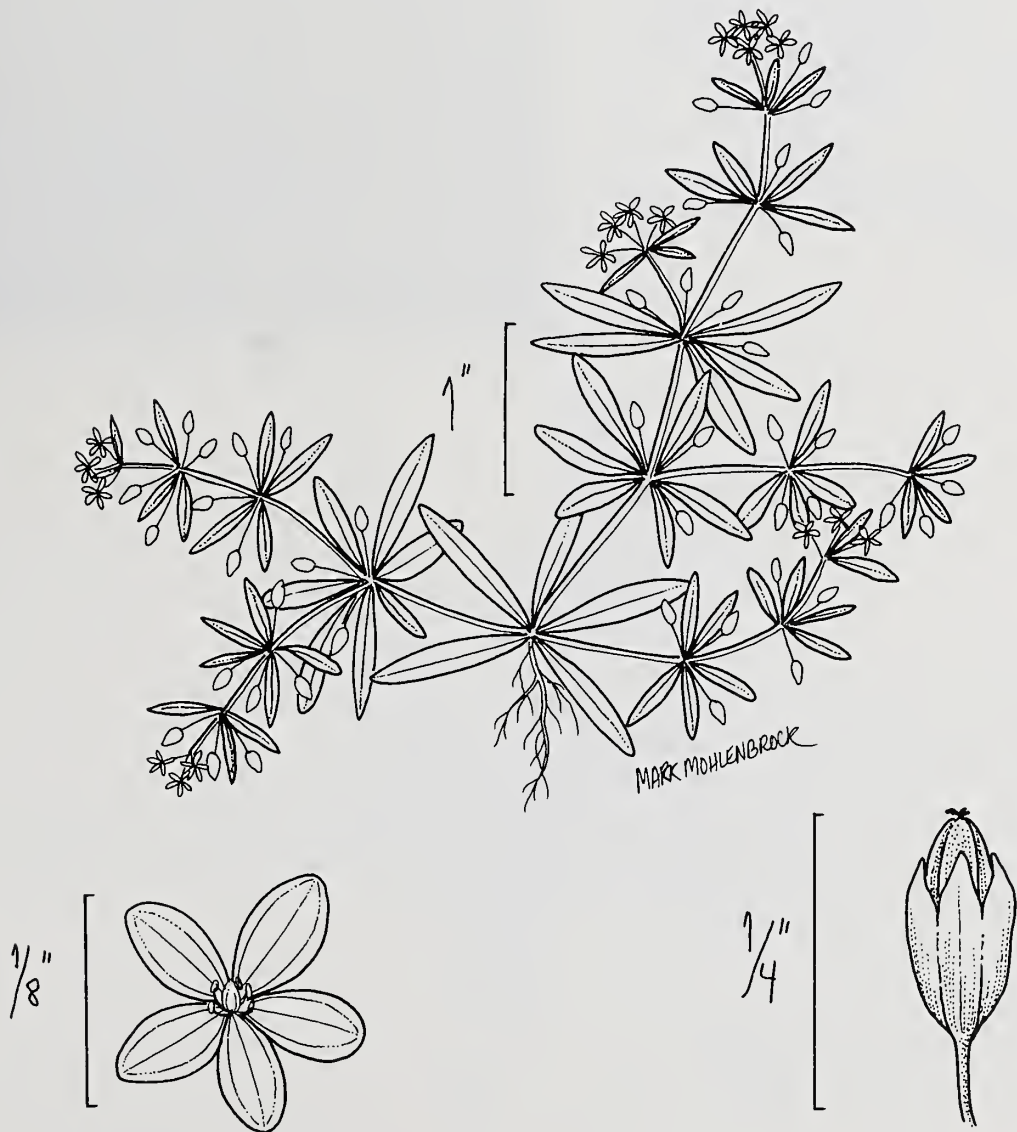
Carpetweed

Mollugo verticillata L.

Family: Carpetweed (Molluginaceae)

May-November

Field Marks: The whorl of leaves that lies flat on the ground readily distinguishes this species.





Local Notes:



Habitat: Disturbed soil.

Habit: Annual herb with a slender taproot.

Stems: Mostly lying flat on the soil, much branched, smooth, forming mats.

Leaves: In whorls of 3-8, simple, oblanceolate, without teeth, smooth, up to 1 1/4 inches long.

Flowers: 2-5 in small clusters, white, up to 1/6 inch broad, on slender stalks up to 2/3 inch long.

Sepals: 5, free, green, persistent on the fruit.

Petals: 5, free, white.

Stamens: 3 or 4.

Pistils: Ovary superior; styles 3-5.

Fruits: Capsule 3-parted.

Foxglove Beardtongue

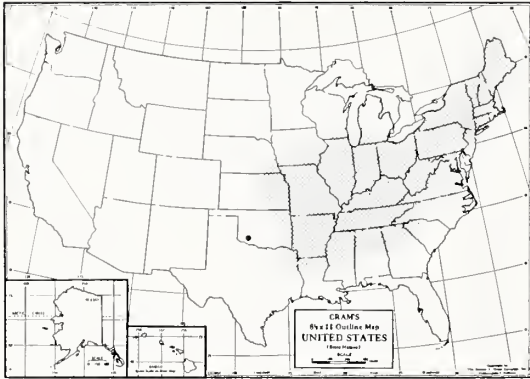
Penstemon digitalis Nutt.

Family: Figwort (Scrophulariaceae)

May-July

Field Marks: Penstemons are recognized by their tubular flowers and 5 stamens, one of which is sterile and densely hairy.





Local Notes:

Habitat: Low woods, wet meadows, wet prairies, fallow fields, roadside ditches.

Habit: Perennial herbs with thickened rootstocks.

Stems: Erect, branched or unbranched, usually smooth, up to 4 feet tall.

Leaves: Opposite, simple, lanceolate to elliptic, pointed at the tip, tapering to the base, with or without a few teeth, smooth, up to 7 inches long, up to 2 1/2 inches wide.

Flowers: Several in terminal racemes, white, up to 1 1/2 inches long.

Sepals: 5, green, free to the base.

Petals: 5, white, 2-lipped, united into a tube with purple stripes inside, up to 1 1/2 inches long.

Stamens: 5, one of which is sterile and densely hairy.

Pistils: Ovary superior.

Fruits: Capsules brown, smooth, up to 1/2 inch long.

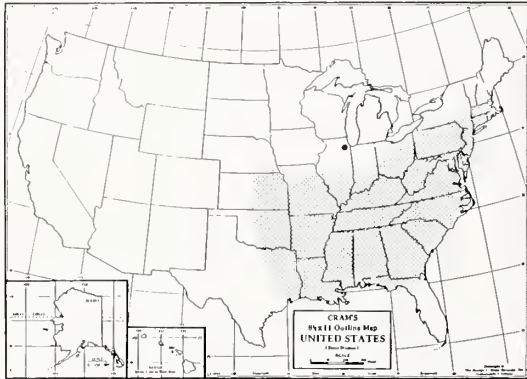
Beefsteak Plant
Perilla frutescens (L.) Britton

Family: Mint (Lamiaceae)

August-October

Field Marks: The leaves are purplish on the lower surface.





Local Notes:



Habitat: Along streams, disturbed soil.

Habit: Annual herb with fibrous roots.

Stems: Erect, branched, smooth or hairy, up to 2 feet tall.

Leaves: Opposite, simple, ovate, pointed at the tip, tapering or rounded at the base, smooth or hairy, usually purplish on the lower surface, up to 5 inches long.

Flowers: Crowded into erect racemes up to 6 inches long; each flower subtended by oval bracts.

Sepals: 5, green, united below, asymmetrical, 2-lipped, hairy.

Petals: 5, purple, united, 2-lipped, usually with equal lobes, up to 1/4 inch long.

Stamens: 4, about as long as the petals.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets 4, red-brown, veiny, up to 1/12 inch long.

Notes: The leaves have the odor of licorice when crushed.

Smooth Phlox

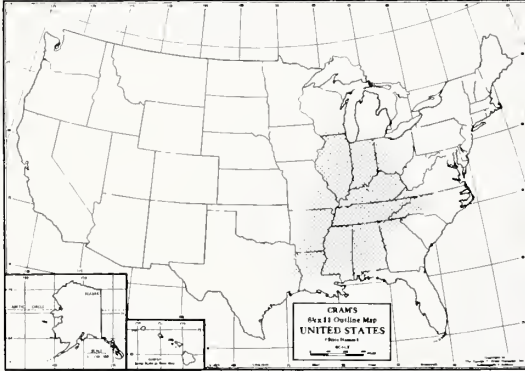
Phlox glaberrima L.

Family: Phlox (Polemoniaceae)

May-June

Field Marks: All species of *Phlox* have opposite, toothless leaves on the stem. In addition, this is the only *Phlox* with 12 or more pairs of narrow, pointed leaves on a smooth stem and sepals no more than 1/3 inch long. The flowers are bright reddish purple.





Local Notes:



Habitat: Low wet areas in prairies, low areas in swampy woods, wet roadside ditches, on stream banks, depressions in wet meadows.

Habit: Herbaceous perennial.

Stems: 1-several, erect, up to 4 feet tall, green, nearly always smooth, bearing 12 or more pairs of leaves.

Leaves: Opposite, simple, toothless, narrowly lanceolate, long-pointed at tip, tapering to base, usually smooth on both surfaces, without conspicuous lateral veins, mostly up to 3 inches long and up to 1/2 inch broad.

Flowers: Several, in a round-topped panicle.

Sepals: 5, green, united, up to 1/3 inch long, the lobes about as long as the tube.

Petals: 5, bright reddish purple, the lobes about 1/2 inch long, the long narrow tube about 1 inch long.

Stamens: 5, not exerted beyond the tube.

Pistils: Ovary superior; styles 3.

Fruits: Rounded capsule shorter than the subtending persistent sepals, containing several narrow, wrinkled seeds.

Notes: The leaves and stems are sometimes browsed by deer. The seeds have minimal value as wildlife food.

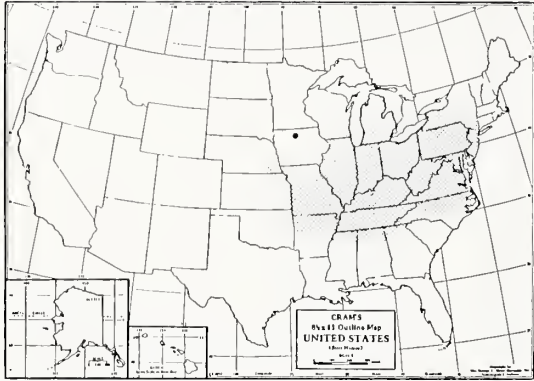
Garden Phlox
Phlox paniculata L.

Family: Phlox (Polemoniaceae)

July-October

Field Marks: This phlox has large terminal panicles of pink flowers, and leaves at least 1/2 inch broad with conspicuous veins.





Local Notes:



Habitat: Low woods, along streams.

Habit: Perennial herb with fibrous roots.

Stems: Erect, branched or unbranched, usually smooth, up to 5 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, rounded or tapering to the base, without teeth, usually hairy on the lower surface, up to 5 inches long, up to 2 1/4 inches broad.

Flowers: Several in a compact terminal panicle, each flower pink, up to 1 inch across.

Sepals: 5, green, united below, smooth or hairy.

Petals: 5, pink, united below to form a narrow tube; the lobes up to 1/2 inch long; the tube up to 1 inch long, usually hairy.

Stamens: 5, protruding beyond the petals.

Pistils: Ovary superior; styles 3.

Fruits: Capsules spherical, smooth.

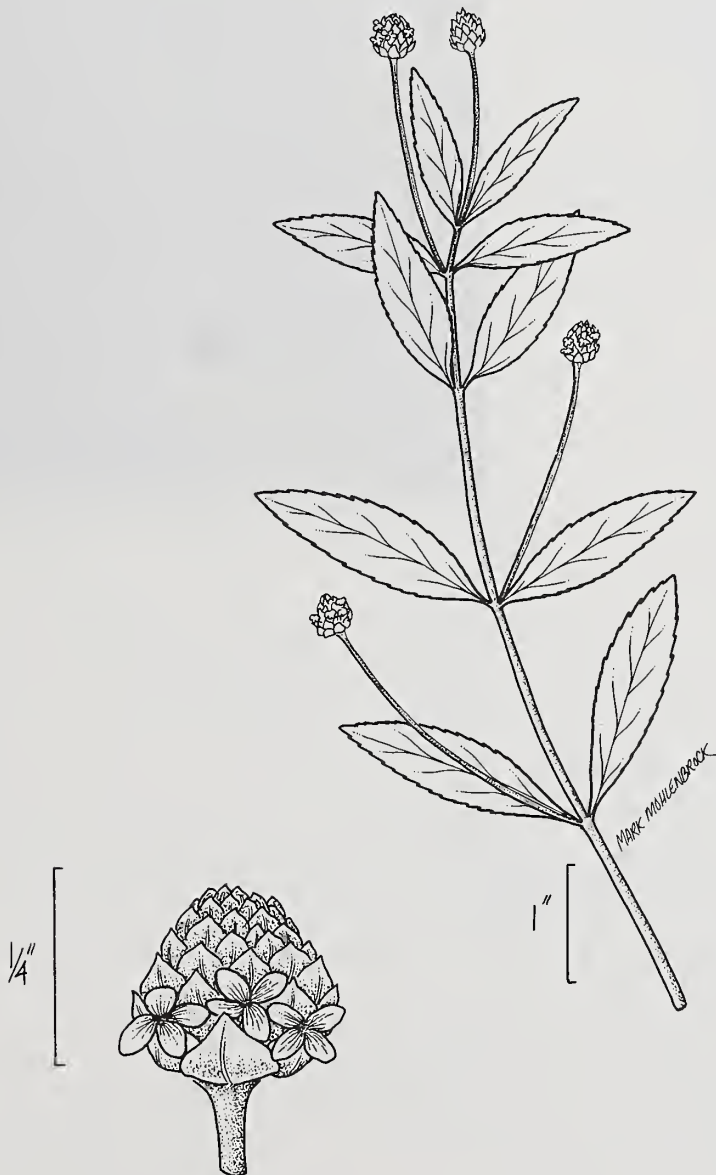
Fog-fruit

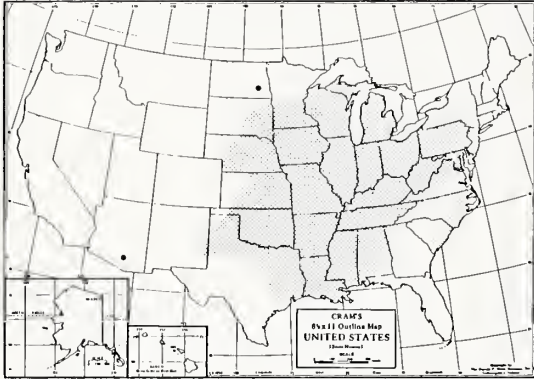
Phyla lanceolata (Michx.) Greene

Family: Vervain (Verbenaceae)

May-September

Field Marks: This species is distinguished by its small purple heads consisting of tiny white or pinkish flowers with 4 petals borne on a leafless stalk.





Local Notes:



Habitat: Along streams, around ponds and lakes, roadside ditches, wet prairies, marshes, sloughs.

Habit: Perennial herb with fibrous roots.

Stems: Creeping or sometimes ascending, often rooting at the nodes, smooth or sparsely hairy, up to 1 1/2 feet long.

Leaves: Opposite, simple, lanceolate to narrowly ovate, pointed at the tip, tapering to the base, coarsely toothed, sparsely hairy on both surfaces, up to 2 inches long.

Flowers: Several in short heads on long leafless stalks from the axils of the leaves, white or purplish, less than 1/4 inch long.

Sepals: 4, green, united below to form a tiny cup.

Petals: 4, white or purplish, more or less united into 2 2-lipped lobes.

Stamens: 4.

Pistils: Ovary superior.

Fruits: Small, dry, spherical, 2-parted.

Notes: This species is sometimes known as *Lippia lanceolata*, and the common name is sometimes Frog-fruit. Waterfowl eat the fruits of this species.

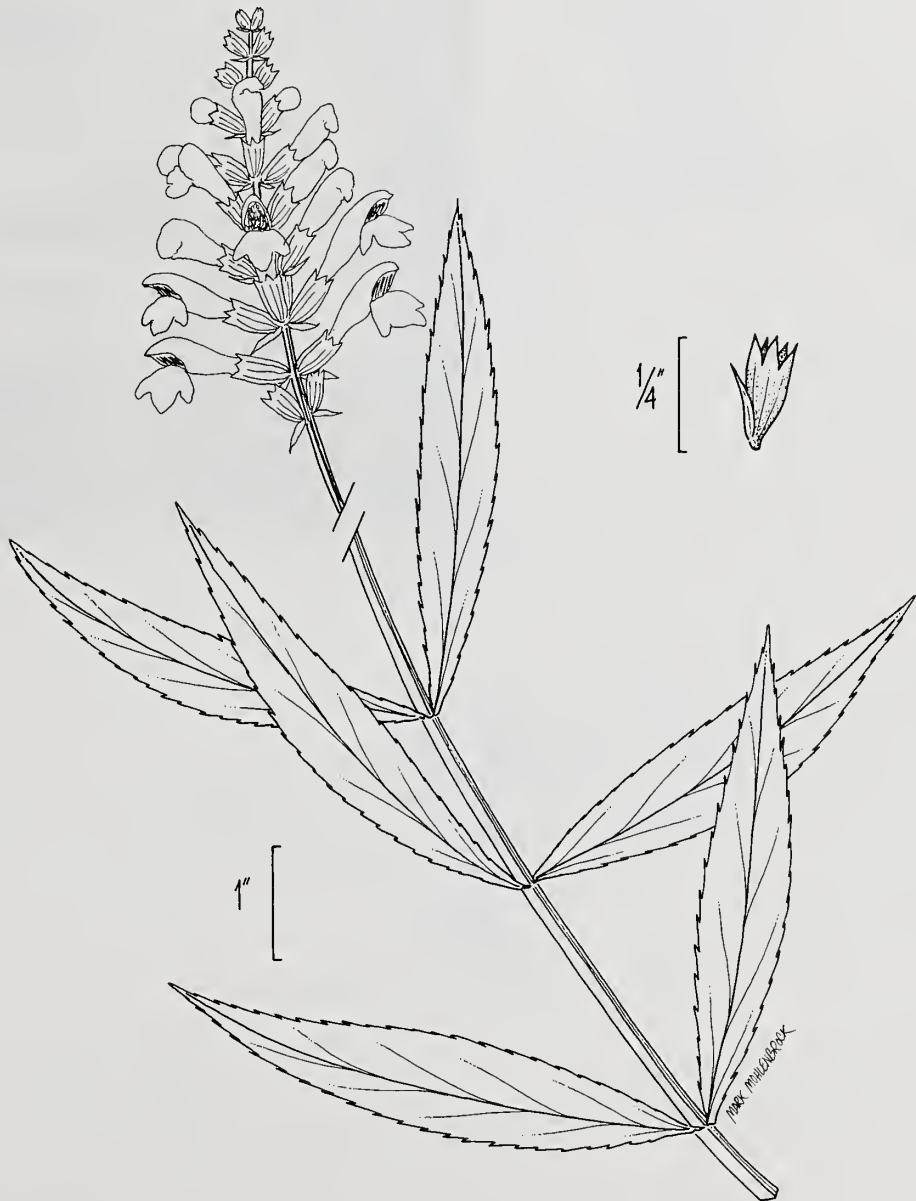
False Dragon-head

Physostegia virginiana (L.) Benth.

Family: Mint (Lamiaceae)

May-September

Field Marks: Species of *Physostegia* have clusters of large, pink flowers. *Physostegia virginiana* differs from others in the genus by its sharply toothed leaves which are at least 1/2 inch broad.





Local Notes:



Habitat: Wet prairies, along streams.

Habit: Perennial herbs with long, slender rhizomes.

Stems: Erect, usually unbranched, smooth, up to 3 feet long.

Leaves: Opposite, simple, narrowly elliptic to lanceolate, pointed at the tip, tapering to the base, sharply toothed, smooth, up to 6 inches long, up to 2 inches broad.

Flowers: Numerous in terminal racemes; each flower bright pink, up to 1 1/4 inches long, subtended by a bract.

Sepals: 5, green, united below.

Petals: 5, bright pink, united below, 2-lipped, up to 1 1/4 inches long.

Stamens: 4.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets 4, smooth, obovoid, up to 1/6 inch long.

Clearweed

Pilea pumila (L.) Gray

Family: Nettle (Urticaceae)

July-October

Field Marks: The clear, translucent stems and the opposite leaves with 3 strong main veins distinguish this species.





Local Notes:



Habitat: Low woods, along streams, around ponds.

Habit: Annual herb with fibrous roots.

Stems: Erect, usually branched, translucent, smooth, up to 2 feet tall.

Leaves: Opposite, simple, ovate, tapering to a long point at the tip, rounded or tapering to the base, conspicuously 3-veined, coarsely toothed, smooth, up to 4 inches long.

Flowers: Male and female flowers borne separately in the same axillary spikes, greenish.

Sepals: Green, minute, usually 4 in the male flowers, usually 3 in the female flowers.

Petals: 0.

Stamens: 4.

Pistils: Ovary superior.

Fruits: Achenes ovoid, flattened, green but often marked with purple, up to 1/12 inch long.

Common Selfheal

Prunella vulgaris L.

Family: Mint (Lamiaceae)

May-September

Field Marks: Distinguishing features of this species are the crowded spikes consisting of many flowers subtended by many overlapping bracts.





Local Notes:

Habitat: Along streams, around ponds and lakes, in roadside ditches, wet prairies, low woods, as well as in drier habitats.

Habit: Perennial herb with basal offshoots.

Stems: Spreading to erect, 4-sided, hairy, up to 2 feet tall.

Leaves: Opposite, simple, lanceolate to elliptic to narrowly ovate, rounded or pointed at the tip, rounded or tapering to the base, with or without teeth, usually hairy, up to 3 1/2 inches long, up to 1 1/2 inches broad; leaf stalks present.

Flowers: Several crowded into cylindrical spikes; each flower 1/2 to 1 inch long, subtended by a ciliate bract.

Sepals: 2-lipped, green or purple, hairy; the upper lip 3-toothed; the lower lip 2-lobed.

Petals: 2-lipped, purple or white, up to 1 inch long; the upper lip unlobed; the lower lip 2-lobed.

Stamens: 4, curved under the upper lip of the corolla.

Pistils: Ovary superior, 4-parted; stigmas 2-cleft.

Fruits: Nutlets 4, dark brown, ribbed, shiny, about 1/10 inch long.

Notes: This plant is also known as heal-all.

Slender Mountain Mint
Pycnanthemum tenuifolium Schrad.

Family: Mint (Lamiaceae)

June-September

Field Marks: This mountain mint has narrow leaves up to 1/6 inch broad and smooth stems.





Local Notes:



Habitat: Wet meadows, along streams, more often in drier habitats.

Habit: Perennial herbs with slender rhizomes.

Stems: Erect, branched, 4-sided, smooth, up to 4 feet tall.

Leaves: Opposite, simple, linear, pointed at the tip, tapering to the base, without teeth, smooth, up to 2 1/4 inches long, 1/6 inch broad.

Flowers: Several in usually flat-topped clusters, each flower 1/8-1/6 inch long.

Sepals: 5, united below, green.

Petals: 5, 2-lipped; the upper lip usually 2-lobed; the lower lip 3-lobed, white with purple dots, hairy.

Stamens: 4.

Pistils: Ovary superior, 4-parted; stigma 2-cleft.

Fruits: Nutlets black, oblong, 1/20 inch long.

Maryland Meadow Beauty

Rhexia mariana L.

Family: Melastome (Melastomaceae)

May-October

Field Marks: This *Rhexia* differs by its unwinged stems and its smooth petals.





Local Notes:



Habitat: Wet prairies, low woods, in ditches.

Habit: Perennial herb with horizontal roots.

Stems: Erect, branched or unbranched, usually hairy, not winged, to 20 inches tall.

Leaves: Opposite, simple, linear-lanceolate to ovate, pointed at the tip, rounded or tapering to the base, without teeth, hairy, up to 3 inches long, up to 1 inch broad.

Flowers: Few in a cyme, up to 1 3/4 inches across, pink to pink-purple.

Sepals: 4, green, united, forming a flask-shaped tube, hairy.

Petals: 4, pink to pink-purple, free, not hairy, up to 1 inch long.

Stamens: 8.

Pistils: Ovary inferior.

Fruits: Capsules flask-shaped, up to 1/3 inch long; seeds brown, slightly warty.

Tooth Cup

Rotala ramosior (L.) Koehne

Family: Loosestrife (Lythraceae)

July-September

Field Marks: Tooth Cup has only one flower per leaf axil. Each flower has 4 tiny pink petals, but they frequently fall away after only a very short time. The narrow leaves are opposite and toothless.





Local Notes:



Habitat: Wet soil, often along margins of ponds and lakes, wet meadows.

Habit: Annual herbs from a tuft of roots.

Stems: 1-several, erect or rarely prostrate, often branched, smooth, up to 1 foot tall.

Leaves: Opposite, simple, oblanceolate to linear, rounded at the tip, tapering to the base, without teeth, smooth, up to 2 inches long, less than 1/2 wide, sessile or with a very short stalk.

Flowers: Solitary in the axils of the leaves, pink, up to 1/8 inch long, without a stalk.

Sepals: 4, green, united below.

Petals: 4, pink, free from each other, falling away early, sometimes completely lacking.

Stamens: 1-6.

Pistils: Ovary superior.

Fruits: Rounded capsules up to 1/4 inch in diameter, with minute yellow or red seeds.

Notes: The seeds are eaten by waterfowl. Another common name for this species is Pink Rotala.

Smooth Ruellia

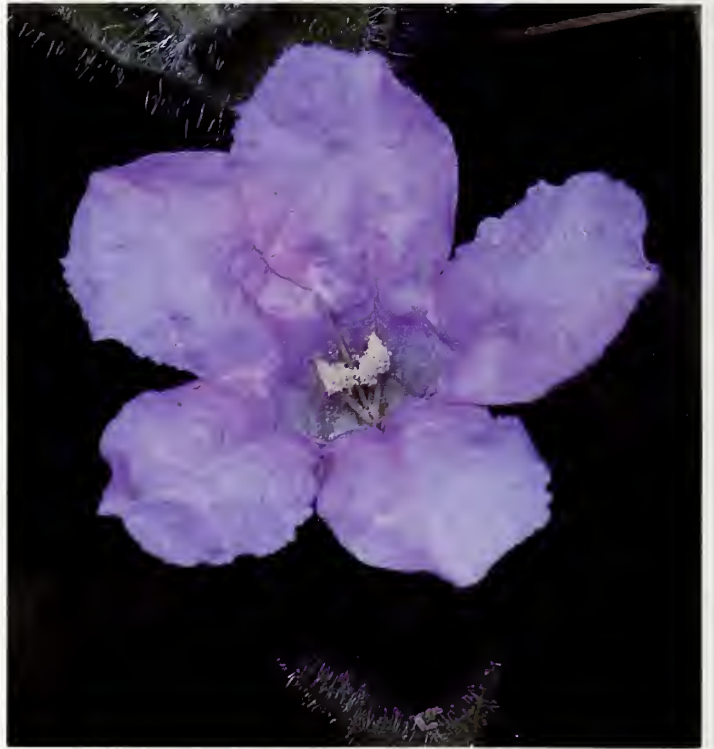
Ruellia strepens L.

Family: Acanthus (Acanthaceae)

May-September

Field Marks: Ruellias have opposite, simple leaves and tubular flowers with 4 stamens. *Ruellia strepens* differs from all the rest by its lanceolate sepals at least 1/10 inch broad.





Local Notes:

Habitat: Moist woods, along streams, around lakes and ponds.

Habit: Perennial herbs with fibrous roots.

Stems: Erect, smooth or branched, slightly hairy, up to 3 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, rounded or tapering to the base, without teeth, smooth or slightly hairy, up to 6 inches long, up to 3 inches broad; leaf stalks up to 1/2 inch long.

Flowers: 1-3 in the axils of the leaves, blue, subtended by a pair of ovate bracts; each flower up to 3 inches long.

Sepals: 5, green, united into a very short tube; the lobes lanceolate, about 1/10 inch broad.

Petals: 5, blue, united to form a funnel-shaped tube; the lobes somewhat unequal in size.

Stamens: 4, not exerted beyond the corolla.

Pistils: Ovary superior; stigmas 2-cleft.

Fruits: Capsules brown, smooth, up to 3/4 inch long; seeds several, brown, 1/10-1/8 inch long.

Rose Pink

Sabatia angularis (L.) Pursh

Family: Gentian (Gentianaceae)

July-August

Field Marks: This species is recognized by its sharply angled, smooth stems, opposite, toothless leaves, and bright pink flowers.





Local Notes:



Habitat: Moist woods, marshes, old fields, glades, thickets.

Habit: Annual herb, with fibrous roots.

Stems: Erect, branched, smooth, sharply angled, up to 2 feet tall.

Leaves: Opposite, simple, ovate to ovate-lanceolate, pointed at the tip, rounded at the sessile base, to 2 inches long.

Flowers: Several in a panicle, bright pink, up to 1 1/2 inches across, on stalks up to 1 1/2 inches long.

Sepals: 5, green, narrow, up to 3/4 inch long.

Petals: 5 (rarely 6), united only at base, up to 3/4 inch long, usually with a greenish “star” in the center.

Stamens: 5.

Pistils: Ovary superior.

Fruits: Capsules ellipsoid, up to 1/2 inch long, with minute, dark brown seeds.

Notes: This species occupies a wide variety of both moist and dry habitats.

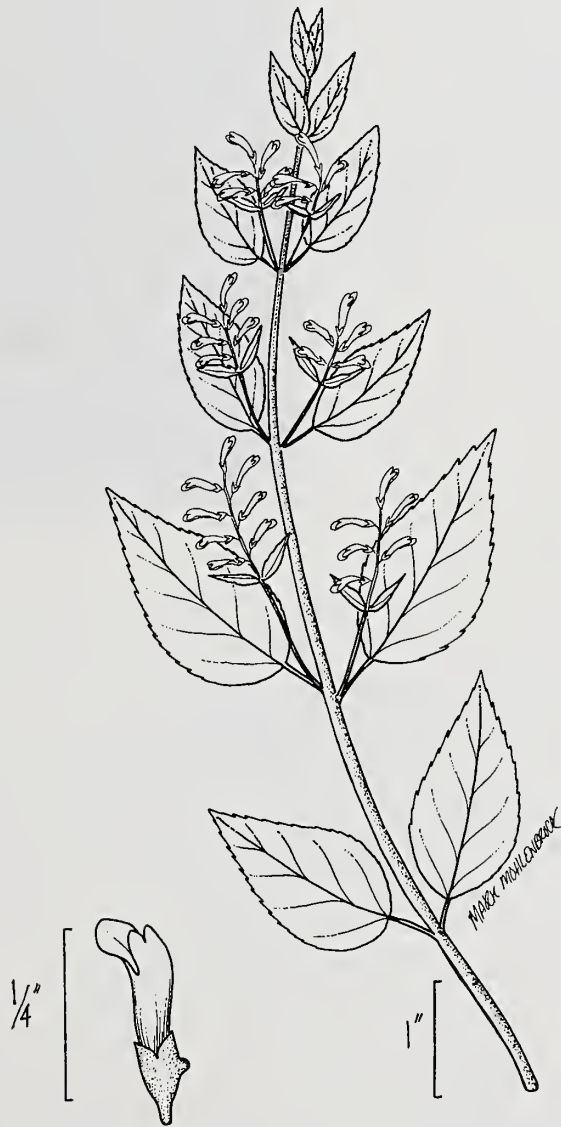
Blue Skullcap

Scutellaria lateriflora L.

Family: Mint (Lamiaceae)

July-October

Field Marks: Skullcaps differ from all other mints by the swelling on the calyx. This species differs from all other species in the genus by its slender racemes, usually smooth stems, and flowers about 1/4 inch long.





Local Notes:

Habitat: Low woods, swamps, along rivers and streams.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, usually branched, smooth or slightly hairy, 4-sided, up to 2 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, rounded at the base, toothed, smooth or slightly hairy, up to 3 inches long.

Flowers: Several in racemes from the axils of the leaves, blue, a little more than 1/4 inch long, bilaterally symmetrical.

Sepals: 5, green, united below, with a swelling on the united part.

Petals: 5, blue, 2-lipped; the upper lip 2-lobed; the lower lip 3-lobed.

Stamens: 4.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets very small, smooth.

Cup-plant

Silphium perfoliatum L.

Family: Aster (Asteraceae)

July-September

Field Marks: The cup formed where each pair of opposite leaves comes together on the stem and the strongly square stems readily identify this species.





Local Notes:

Habitat: Along streams, around ponds, low woods, wet meadows.

Habit: Coarse perennial herb with thickened rootstocks.

Stems: Erect, branched or unbranched, square, usually smooth, up to 10 feet tall.

Leaves: Opposite, simple, ovate, pointed at the tip, united at the base with the opposing leaf to form a cup, coarsely toothed, rough to the touch, up to 1 foot long, up to 6 inches broad.

Flowers: Many crowded together into heads, with numerous heads per plant; each head up to 3 inches across, subtended by elliptic to ovate, ciliate bracts, composed of 20-30 yellow rays and a central yellow disk.

Sepals: 0.

Petals: Yellow, some united to form rays, others united to form tubes that comprise the central disk.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes obovoid, winged, up to 1/2 inch broad.

Notes: The cups formed by the bases of the leaves accumulate water.

Smooth Buttonweed

Spermacoce glabra Michx.

Family: Madder (Rubiaceae)

June-October

Field Marks: This species is distinguished by clusters of small white flowers in the axils of the leaves and its smooth or slightly hairy stems and leaves.





Local Notes:

Habitat: Wet woods, along streams, around ponds and lakes, fallow fields, sloughs.

Habit: Perennial herb with a woody root.

Stems: Erect, usually branched, 4-sided, usually smooth, up to 2 feet long.

Leaves: Opposite, simple, elliptic, pointed at the tip, tapering to the base, without teeth, finely hairy or smooth, up to 3 inches long, up to 1 inch broad.

Flowers: Few to several in crowded, rounded clusters in the axils of the leaves; each flower white, 1/6-1/4 inch long.

Sepals: 4, green, united at the base.

Petals: 4, white, united below into a short tube.

Stamens: 4, not exserted beyond the petals.

Pistils: Ovary inferior, smooth.

Fruits: Capsule splitting into two 1-seeded parts at maturity.

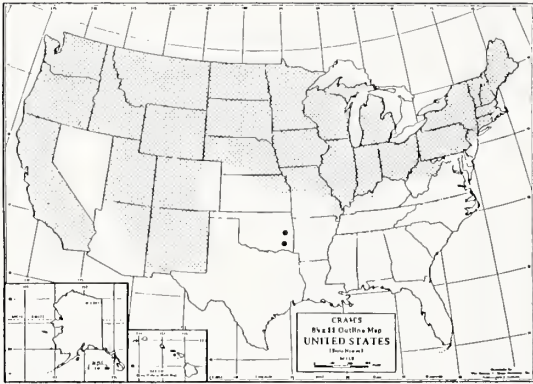
Woundwort
Stachys palustris L.

Family: Mint (Lamiaceae)

June-September

Field Marks: This species of *Stachys* is distinguished by its hairy leaves and stems.





Local Notes:



Habitat: Wet meadows, wet prairies, swamps, sloughs, edges of lakes.

Habit: Perennial herb with slender rhizomes and white tubers.

Stems: Erect, branched or unbranched, hairy, up to 3 feet tall.

Leaves: Opposite, simple, lanceolate to narrowly ovate, pointed at the tip, rounded at the base, toothed, hairy, up to 4 inches long.

Flowers: Usually 6 in a whorl, with several whorls along the upper end of the stem, rose-purple.

Sepals: 5, slightly unequal in size, united below, up to 1/2 inch long, densely hairy.

Petals: 5, united into 2 lips, rose-purple, up to 3/4 inch long, hairy on the outside.

Stamens: 4.

Pistils: Ovary superior, 4-parted.

Fruits: Dark brown, shiny, about 1/10 inch long.

Notes: The nutlets are eaten by wildlife.

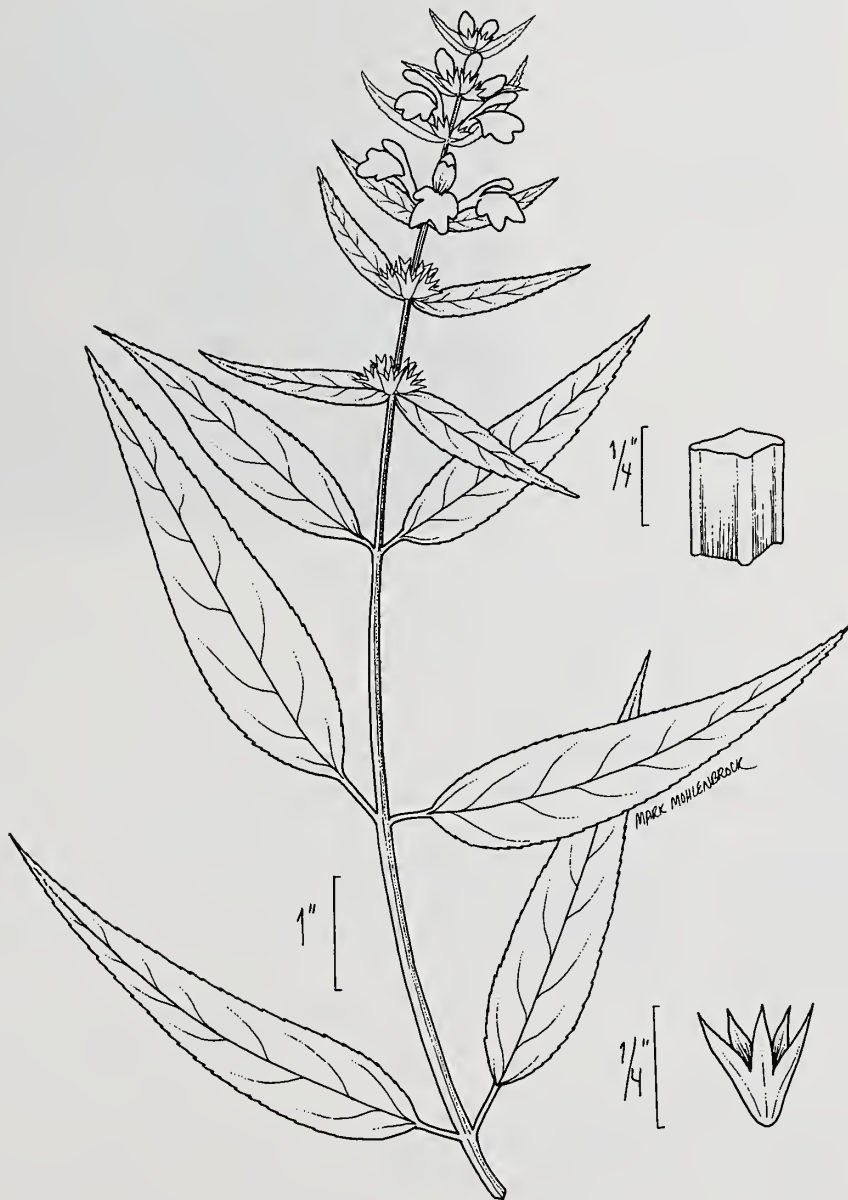
Smooth Hedge Nettle

Stachys tenuifolia Willd.

Family: Mint (Lamiaceae)

June-September

Field Marks: This species of *Stachys* has generally smooth stems and conspicuously veiny leaves.





Local Notes:



Habitat: Wet woods, along streams, around ponds and lakes, swamps, sloughs.

Habit: Perennial herb with tufted roots.

Stems: Erect, unbranched, 4-sided, smooth or with some hairs only on the angles, up to 2 1/2 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, rounded at the base, toothed, smooth or sometimes hairy, conspicuously veiny, up to 3 inches long.

Flowers: Several in interrupted spikes at the top of the stems; each flower subtended by a bract, purple, bilaterally symmetrical, up to 1/2 inch long.

Sepals: 5, purple, 2-lipped: the upper lip 2-lobed; the lower lip 3-lobed.

Stamens: 4.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets about 1/10 inch long.

Notes: The nutlets are utilized by wildlife.

Canada Germander

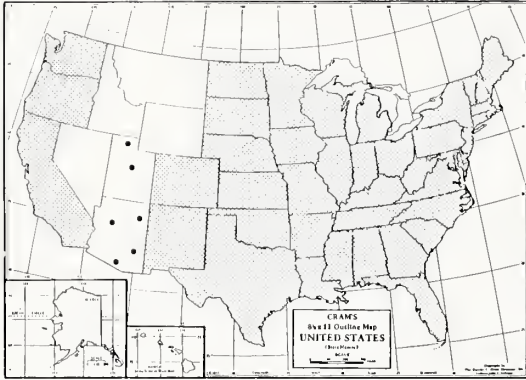
Teucrium canadense L.

Family: Mint (Lamiaceae)

June-September

Field Marks: Only one lip of the flower is developed in this species, distinguishing it from all other mints.





Local Notes:



Habitat: Moist woods, along streams, in meadows.

Habit: Perennial herb with long, slender rhizomes.

Stems: Erect, branched or rarely unbranched, hairy, up to 4 feet tall.

Leaves: Opposite, simple, lanceolate to narrowly ovate, pointed at the tip, tapering to or rounded at the base, round-toothed.

Flowers: Many crowded in terminal spikes, the spikes up to 6 inches long, each flower purplish, subtended by a short, narrow bract.

Sepals: 5, green, united below, asymmetrical.

Petals: 5, asymmetrical, the upper lip absent, the lower lip 3-lobed, up to 1/2 inch long, purplish.

Stamens: 4, protruding beyond the petals.

Pistils: Ovary superior, 4-lobed.

Fruits: Nutlets 4, yellow-brown, veiny, ellipsoid, up to 1/10 inch long.

Marsh St. Johnswort

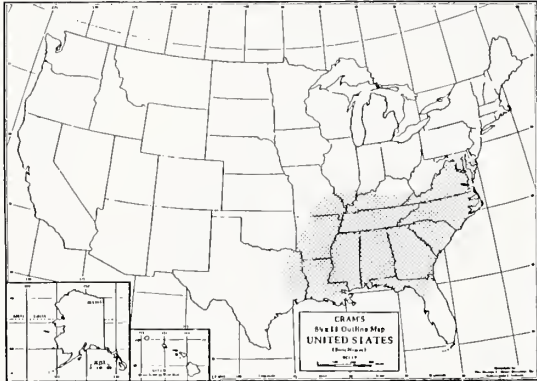
Triadenum walteri (J.F.Gmel.) Gleason

Family: St. Johnswort (Hypericaceae)

August-October

Field Marks: Species of *Triadenum* have 5 pink petals, 9 stamens, and opposite leaves. This one is further distinguished by its blunt sepals and its stalked leaves with black glandular dots.





Local Notes:

Habitat: Swamps, marshes, low woods.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, branched or unbranched, smooth, up to 2 1/2 feet tall.

Leaves: Opposite, simple, oblong to elliptic to ovate, rounded at the tip, tapering to the short-stalked base, without teeth, smooth, with black glandular dots, up to 4 inches long, up to 2 inches broad.

Flowers: Few in clusters in the axils of the leaves, pink.

Sepals: 5, greenish, rounded at the tip, up to 1/6 inch long.

Petals: 5, pink, free from each other, up to 1/3 inch long.

Stamens: 9, in 3 groups of 3 each.

Pistils: Ovary superior; styles 3.

Fruits: Capsules ellipsoid to ovoid, smooth, up to 1/2 inch long, with many brown seeds.

Notes: The seeds are eaten by waterfowl.

Blue Vervain

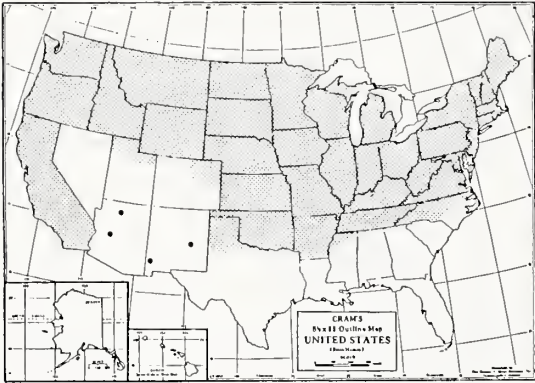
Verbena hastata L.

Family: Vervain (Verbenaceae)

June-October

Field Marks: This erect *Verbena* has broadly ovate leaves, leaf stalks at least 1/3 inch long, and blue flowers.





Local Notes:



Habitat: Low woods, wet prairies, wet meadows, along streams, in sloughs, in disturbed soil.

Habit: Perennial herb with fibrous roots.

Stems: Erect, branched, rough-hairy, 4-sided, up to 5 feet tall.

Leaves: Opposite, simple, lanceolate to ovate, pointed at the tip, often 3-lobed at the base, coarsely toothed, smooth or hairy.

Flowers: Crowded into several terminal spikes, each blue flower subtended by a small bract.

Sepals: 5, unequal in size, green, united, hairy, about 1/10 inch long.

Petals: 5, unequal, united to form a short tube about 1/8 inch long, blue.

Stamens: 5, attached to the petals.

Pistils: Ovary superior, 4-parted.

Fruits: Nutlets 4, very narrow, smooth, about 1/10 inch long.

Notes: The seeds are eaten by wildlife.

Purslane Speedwell

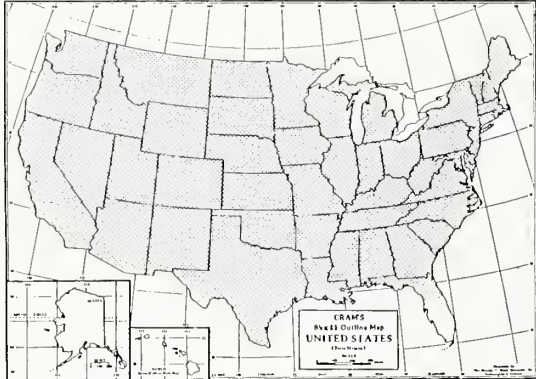
Veronica peregrina L.

Family: Figwort (Scrophulariaceae)

April-August

Field Marks: This is the only speedwell in the area with white flowers.





Local Notes:



Habitat: Fallow fields, disturbed soil, low woods.

Habit: Annual herb with fibrous roots.

Stems: Erect, sometimes branched, smooth, up to 1 foot tall.

Leaves: Opposite, simple, oblong to linear, rounded at the tip, tapering or rounded at the base, with or without a few teeth, smooth, up to 1 inch long.

Flowers: White, borne in the axils of reduced, upper leaves.

Sepals: 4, green, united only at the base, more or less rounded at the tip.

Petals: 4, white, united below, less than 1/4 inch long.

Stamens: 2, attached to the petals.

Pistils: Ovary superior, smooth.

Fruits: Capsules heart-shaped, flattened, smooth, up to 1/6 inch long, usually a little broader.

Culver's-root

Veronicastrum virginicum (L.) Farw.

Family: Figwort (Scrophulariaceae)

June-September

Field Marks: This species is easily identified by its whorls of toothed leaves and its candelabra-like spikes of pink flowers.





Local Notes:



Habitat: Wet meadows, as well as a variety of usually more dry habitats.

Habit: Perennial herb with rhizomes.

Stems: Erect, branched, smooth or sometimes hairy, up to 6 feet tall.

Leaves: In whorls of 3-6, simple, lanceolate to lance-ovate, pointed at the tip, tapering to the base, toothed, smooth or hairy, up to 4 inches long, up to 3/4 inch broad.

Flowers: Several crowded into several erect spikes, pink; each spike up to 6 inches long.

Sepals: 4-5, united, unequal.

Petals: Usually 5, united into a tube; the tube up to 1/2 inch long, pink.

Stamens: 2, attached to the petals.

Pistils: Ovary superior, smooth.

Fruits: Capsule ovoid, up to 1/4 inch long.

Notes: The root contains substances that have been used in the past for medicinal purposes.

GROUP 8

**Dicot Herbs
With Most of the Leaves
Simple and Alternate**

Amaranth Tumbleweed

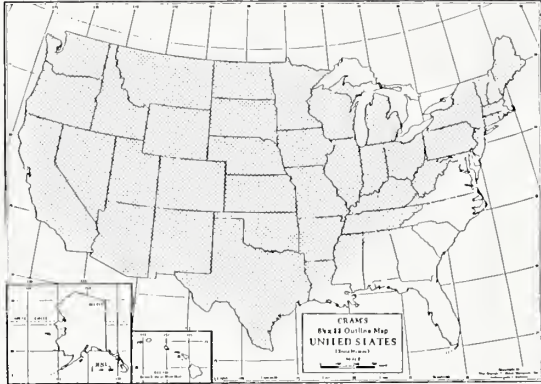
Amaranthus albus L.

Family: Pigweed (Amaranthaceae)

July-October

Field Marks: The flowers of this species are borne in small clusters in the axils of the leaves. The stems are usually whitish and the seeds less than 1/20 inch broad.





Local Notes:

Habitat: Fallow fields, along streams, disturbed soil.

Habit: Annual herb with fibrous roots.

Stems: Erect or arching upward, eventually often forming a spherical clump, smooth, usually whitish.

Leaves: Alternate, simple, obovate to oblong, usually rounded at the tip except sometimes with a short point, tapering to the base, smooth, without teeth, up to 3 inches long.

Flowers: Male and female flowers borne separately on the same plant, in small clusters in the axils of the leaves, green; each flower usually subtended by small, often sharp-pointed bracts.

Sepals: Usually 5, free, persisting on the fruit.

Petals: 0.

Stamens: 2-3.

Pistils: Ovary superior.

Fruits: Capsules opening at the top, with seeds less than 1/20 inch broad.

Notes: After maturity, the spherical plants are blown about by the wind, often being seen caught in fences.

Redroot Amaranth

Amaranthus retroflexus L.

Family: Pigweed (Amaranthaceae)

July-October

Field Marks: All amaranths have obscure, crowded, green flowers. The green amaranth differs from all others by lacking spines, by having both male and female flowers on the same plant, by having spikes much longer than broad, and by having sepals of the female flowers not pointed at the tip and about 1/5 inch long.





Local Notes:

Habitat: Cultivated fields, roadsides, disturbed areas.

Habit: Coarse annual with fibrous roots.

Stems: Erect, often branched, hairy, green or sometimes reddish near the base, up to 6 feet tall.

Leaves: Alternate, simple, elliptic to ovate, usually somewhat toothed, hairy, pointed at the tip, tapering to the base, up to 4 inches long, green, each flower unisexual but with both the male and female flowers on the same plant, with bracts about 1/3 inch long, longer than the sepals.

Flowers: Borne in short, dense, sometimes branched spikes up to 8 inches long, green, each flower unisexual but with both the male and female flowers on the same plant, with bracts about 1/3 inch long, longer than the sepals

Male Flowers: Sepals 5, green, about 1/6 inch long; petals 0; stamens 5.

Female Flowers: Sepals 5, green, about 1/5 inch long, not pointed at the tip; petals 0; ovary superior.

Fruits: 1-seeded, dry, smooth, 1/6 inch long, the seeds dark red-brown.

Notes: This aggressive weed is native to tropical America, but is found throughout the United States in disturbed areas. Young plants can be cooked and eaten as a vegetable. Seeds can be made into bread. Pigs are particularly fond of this species as a food. There are reports of this plant when growing in fertilizer-rich soils as being harmful to livestock. This species may cause hay fever in certain individuals.

Nuttall's Waterhemp

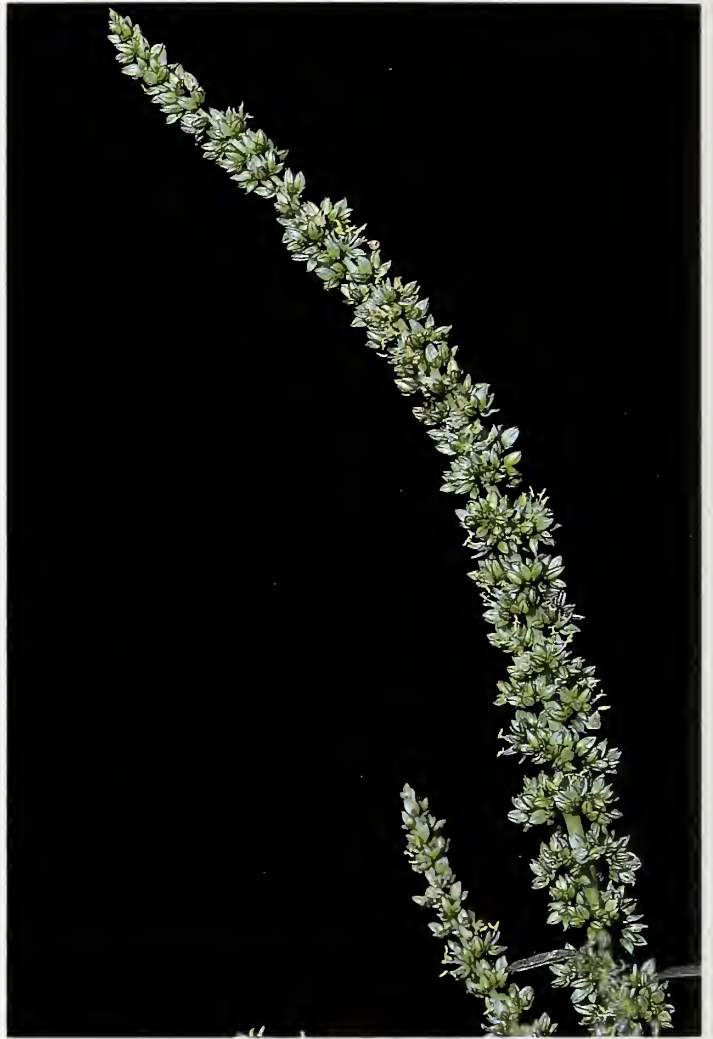
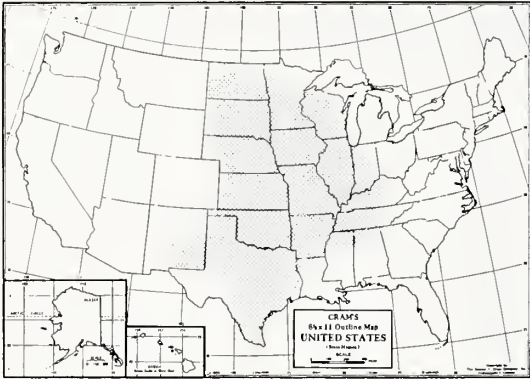
Amaranthus rudis Sauer

Family: Pigweed (Amaranthaceae)

July-October

Field Marks: Species known as water hems differ from all other species of *Amaranthus* by having the male and female flowers borne on different plants and by having 0-2 sepals for each female flower. This is the only water hemp with a completely dehiscent fruit.





Local Notes:

Habitat: Banks of streams, edges of ponds and lakes, mud flats, sloughs, cultivated fields.

Habit: Stout annual herbs with fibrous roots.

Stems: Erect, sometimes branched, smooth, up to 4 1/2 feet tall.

Leaves: Alternate, simple, oblong to oval, rounded at the tip, tapering to the base, smooth, without teeth, up to 4 inches long; leaf stalks slender.

Flowers: Crowded into slender, terminal spikes, green, the male and female flowers on separate plants.

Male Flowers: Sepals 5, green, up to 1/6 inch long, pointed at the tip; petals 0; stamens 5.

Female Flowers: Sepals 0-2, green, pointed; petals 0; ovary superior.

Fruits: Ovoid, greenish, smooth, subtended by a shorter bract, dehiscent, with small spherical seeds.

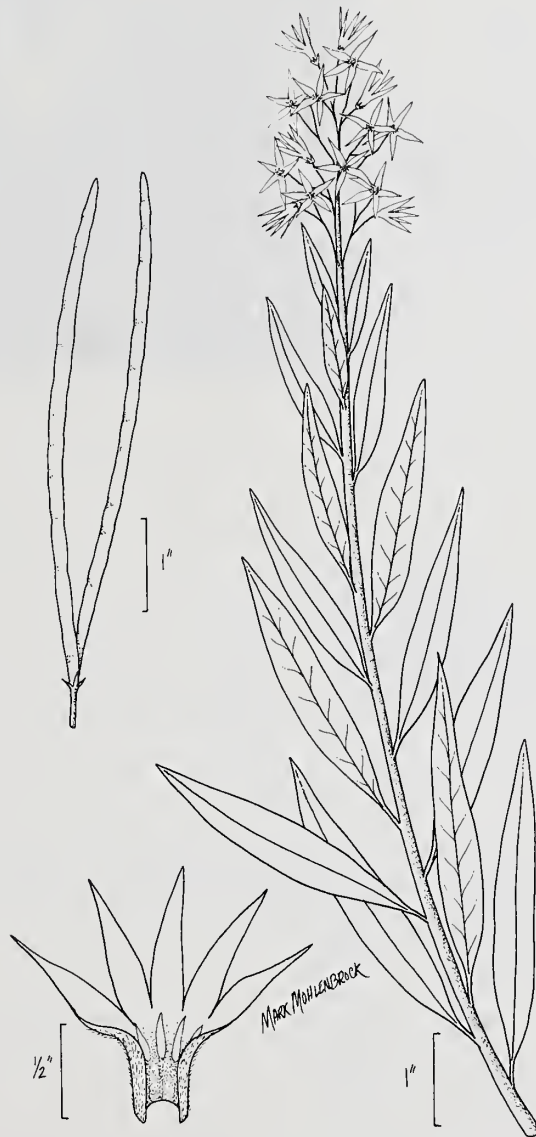
Notes: Waterfowl eat the seeds of this species. This water hemp can be the cause of hay fever in late summer. This species has been known as *A. tamariscinus*.

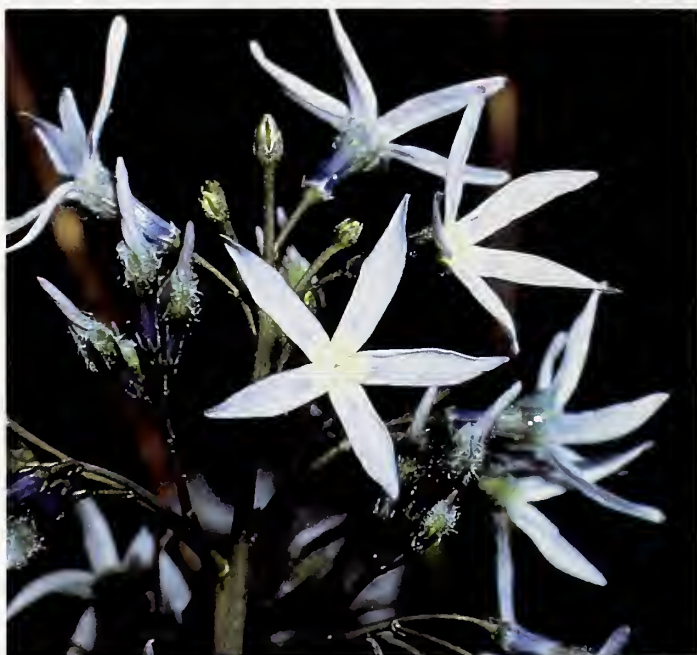
Willow Amsonia
Amsonia tabernaemontana Walt.

Family: Dogbane (Apocynaceae)

May-June

Field Marks: Members of the dogbane family usually have milky sap and 5-parted flowers. Blue star differs from all the others by having alternate, non-shiny leaves, erect fruits, and pale blue star-shaped flowers.





Local Notes:

Habitat: Bottomland forests, mesic woods, damp roadside ditches, river banks.

Habit: Perennial herbs.

Stems: Erect, usually several together, unbranched, smooth or less commonly hairy, up to 3 feet tall.

Leaves: Alternate, simple, lanceolate to ovate, pointed at the tip, tapering or rounded at the base, without teeth, smooth or sometimes hairy, not shiny, up to 5 inches long, up to 2 1/2 inches wide.

Flowers: Several in a terminal cyme, pale blue.

Sepals: 5, united below, smooth.

Petals: 5, united below into a slender, hairy tube 1/4-1/3 inch long, the lobes pointed, spreading, 1/4-1/3 inch long.

Stamens: 5, attached to the tube of the petals.

Pistils: Ovaries 2, superior.

Fruits: Paired follicles, erect, cylindrical, smooth, up to 4 1/2 inches long.

Rush Aster

Aster junciformis Rydb.

Family: Aster (Asteraceae)

August-October

Field Marks: This white-rayed aster is distinguished by its usually smooth stem and its smooth, linear leaves up to 1/4 inch broad.





Local Notes:

Habitat: Bogs, fens.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, sparsely branched, smooth or with short hairs, up to 2 feet tall.

Leaves: Alternate, simple, linear to linear-lanceolate, pointed at the tip, rounded or tapering to the base, usually without teeth, smooth, up to 6 inches long, up to 1/4 inch broad.

Flowers: Many, crowded into a head, with several heads per plant, each head up to 1 1/2 inches across, subtended by many green bracts; flowers of 2 kinds: the outer white and ray-like, up to 50 in number; the inner tubular, yellow, forming a disk.

Sepals: 0.

Petals: Some white, very narrow, ray-like; others yellow, 5-lobed, united below into a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes elongated, usually slightly hairy, with a tuft of hairs at the tip.

Calico Aster

Aster lateriflorus (L.) Britt.

Family: Aster (Asteraceae)

August-November

Field Marks: This species differs from other white-flowered asters by having the midvein on the lower surface of the leaf hairy while the rest of the leaf is smooth.





Local Notes:



Habitat: Low woods, wet prairies, swamps, sloughs, edges of streams, borders of ponds and lakes.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, slender, branched or unbranched, smooth or hairy, green or purple, up to 3 1/2 feet tall.

Leaves: Alternate, simple, linear-lanceolate to elliptic, pointed at the tip, tapering to the base, with or without teeth, sometimes rough to the touch but not hairy on the upper surface, smooth on the lower surface except for the hairy midvein, up to 6 inches long, up to 1 1/2 inches wide.

Flowers: Many crowded into a head, with many heads per plant, each head up to 3/4 inch across, composed of 2 kinds of flowers, the outer flowers white and ray-like, the inner yellow, tubular, forming a disk.

Sepals: Absent.

Petals: Some white, very narrow, ray-like, about 10-50 in number, others yellow, 5-parted, forming a short tube.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes elongated, hairy, light brown, about 1/10 inch long.

Notes: The leaves are eaten by white-tailed deer, while the fruits are eaten by waterfowl.

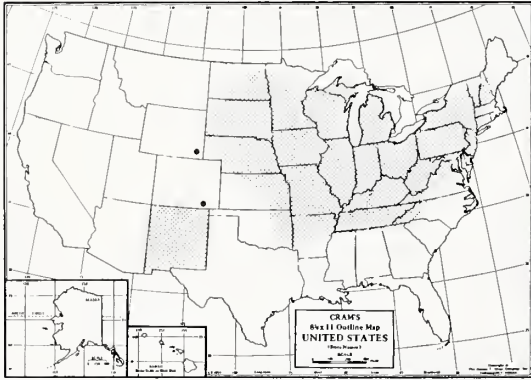
Aster novae-angliae L.

Family: Aster (Asteraceae)

August-October

Field Marks: This aster is distinguished by its 40-80 violet-purple rays per flowerhead, and its toothless clasping leaves on the stem.





Local Notes:



Habitat: Wet prairies, wet meadows, low fields, along streams, marshes, bogs.

Habit: Perennial herbs with short, thick rhizomes.

Stems: Erect, solitary or several in clumps, hairy, up to 7 feet tall.

Leaves: Alternate, simple, lanceolate, without teeth, pointed at the tip, heart-shaped and clasping the stem at the base, hairy, up to 4 inches long, less than 1 inch wide.

Flowers: Many crowded into a head, the outer violet-purple and ray-like, the inner tubular, yellow, forming a disk, with several heads per plant, each head up to 1 1/2 inches across, subtended by many narrow green bracts.

Sepals: 0.

Petals: Some violet-purple, narrow, united to form rays, up to 3/4 inch long, others yellow, 5-lobed, united below into a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes dark brown, ellipsoid, hairy, up to 1/6 inch long.

Notes: This is a very showy species that is sometimes transplanted into flower gardens.

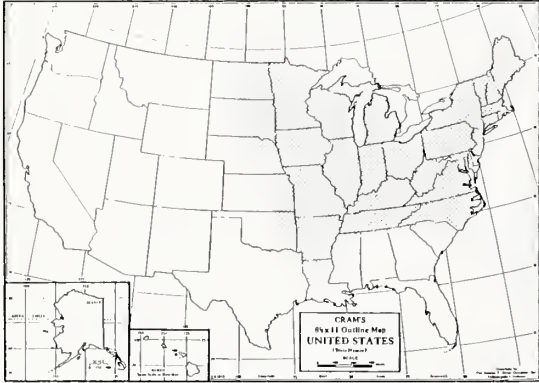
Aster simplex Willd.

August-October

1"

1/4"

MACK MULLER-BROCK



Local Notes:



Habitat: Wet meadows, wet prairies, wet roadside ditches, low woods, sloughs, edges of streams, borders of ponds and lakes.

Habit: Perennial herb with long rhizomes.

Stems: Erect, rather stout, branched or unbranched, green, smooth or nearly so, up to 6 feet tall.

Leaves: Alternate, simple, elliptic to oblanceolate, pointed at the tip, tapering to the base, toothed, smooth on both surfaces, up to 8 inches long, up to 1 1/4 inches wide.

Flowers: Many crowded into a head with many heads per plant, each head up to 3/4 inch across and subtended by many narrow whitish bracts with a green midvein, the outer flowers white and ray-like, the inner yellow, tubular, forming a disk.

Sepals: Absent.

Petals: Some white, very narrow, ray-like, 20-50 in number, others yellow, 5-parted, forming a short tube.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes elongated, hairy, light brown, about 1/10 inch long.

Notes: The fruits of this species are eaten by waterfowl.

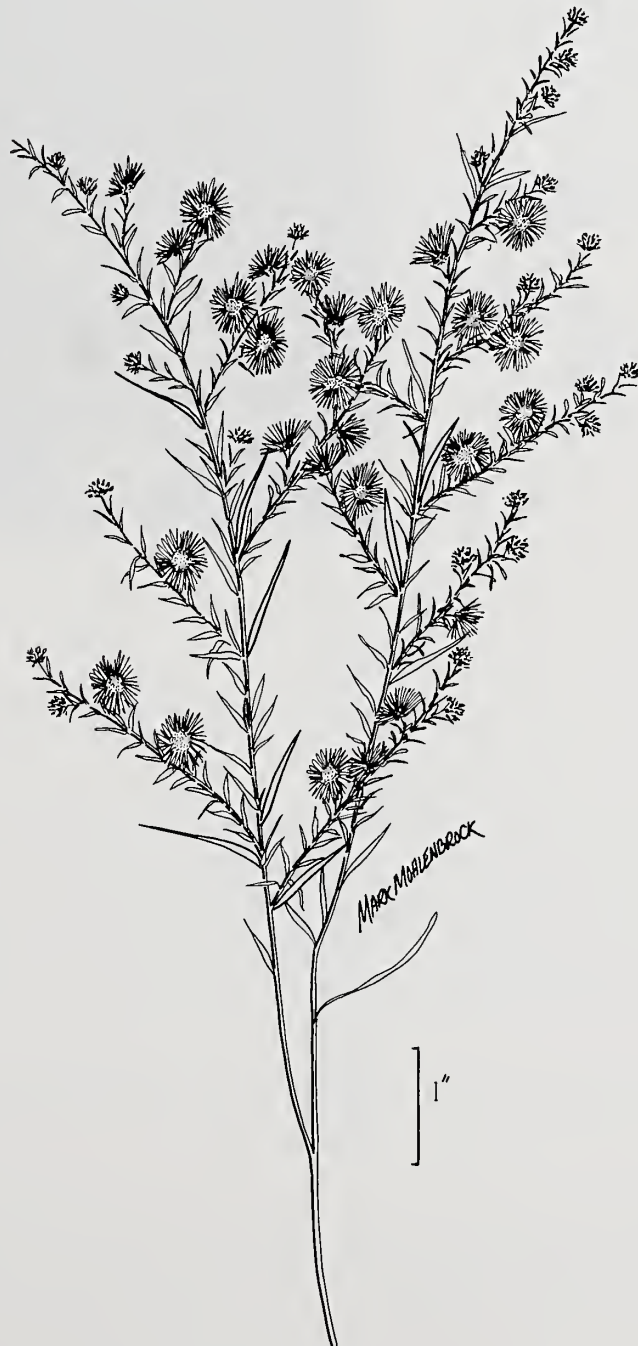
Fairy Aster

Aster vimineus Lam.

Family: Aster (Asteraceae)

August-October

Field Marks: Among all the asters with white rays, the fairy aster is the only one with flat, green bracts that are not spiny tipped, heads less than 1/4 inch high, leaves along the stems bearing the heads less than 2/3 inch long, and the branches bearing the flowers arched and spreading.





Local Notes:



Habitat: Wet meadows, wet prairies, swampy woods, roadside ditches, along streams, around ponds and lakes.

Habit: Perennial herbs with creeping rhizomes.

Stems: Erect, branched, smooth or somewhat hairy, sometimes purplish, up to 4 feet tall.

Leaves: Alternate, simple, linear to lanceolate, pointed at the tip, tapering to the sessile base, with or without teeth, smooth except for the roughened margins, up to 4 inches long, up to 1/2 inch wide.

Flowers: Many, crowded together into a head, the outer white and ray-like, the inner tubular, yellow, forming a disk, with several heads per plant, each head up to 1/2 inch across, subtended by several flat, pointed, green bracts.

Sepals: 0.

Petals: Some white, narrow, united to form rays, up to 1/4 inch long, others yellow, 5-lobed, united below into a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes dark, sparsely hairy, 1/12 inch long.

Notes: The fruits are eaten by waterfowl.

Marsh Boltonia
Boltonia asteroides (L.) L'Her.

Family: Aster (Asteraceae)

July-October

Field Marks: This white-rayed species is distinguished by its completely smooth stems and leaves, its blue-green lanceolate leaves at least 1/2 inch wide, and its completely unwinged stems.





Local Notes:



Habitat: Wet prairies, wet meadows, marshes, roadside ditches, along streams, around ponds and lakes.

Habit: Perennial herbs with slender rhizomes.

Stems: Erect, branched or unbranched, smooth, up to 7 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, blue-green, smooth, up to 4 inches long, up to 2/3 inch wide.

Flowers: Many crowded together into a head, the outer ones white and ray-like, the inner ones yellow and tubular, forming a disk, each head subtended by numerous small, green bracts.

Sepals: 0.

Petals: Some white to pale lilac, united to form rays up to 2/3 inch long, others yellow, united to form a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes flattened, winged, ciliate, about 1/10 inch long, with 2 small awns at the upper end.

Notes: The small fruits are eaten by waterfowl.

Hedge Bindweed

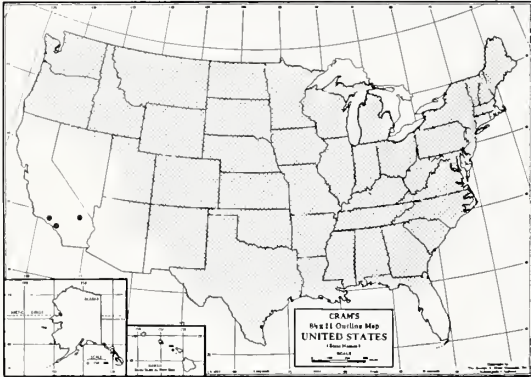
Calystegia sepium (L.) R. Br.

Family: Morning-glory (Convolvulaceae)

May-September

Field Marks: This is the only large-flowered, white, viny bindweed or morning-glory that does not have a reddish purple center and that has large bracts that conceal the sepals.





Local Notes:

Habitat: Wet meadows, old fields, along streams, around ponds and lakes, roadside ditches.

Habits: Trailing, twining, or climbing, vine from coarse rootstocks.

Stems: Slender, usually twining, much branched, smooth or hairy, sometimes up to 8 feet long.

Leaves: Alternate, simple, triangular, pointed at the tip, arrowhead-shaped at the base, smooth or hairy, without teeth, up to 4 inches long, up to 2 inches wide; leaf stalk as long as the blade.

Flowers: Solitary from the axils of the leaves, on stalks at least as long as the leaves, each flower with a pair of green, ovate bracts that conceal the sepals.

Sepals: 5, green.

Petals: White, rarely pinkish, united to form a funnel-shaped corolla up to 3 inches long, without a reddish purple center.

Stamens: 5, attached near the base of the corolla.

Pistils: Ovary superior.

Fruits: Capsules green, nearly spherical.

Notes: There are reports that this species may be poisonous when eaten by some animals.

American Bellflower

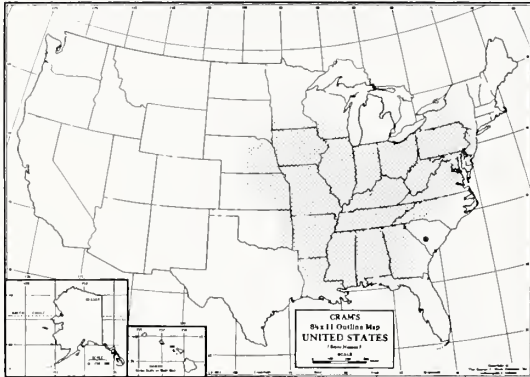
Campanula americana L.

Family: Bellflower (Campanulaceae)

June-October

Field Marks: Members of the genus *Campanula* have 5 sepals, 5 united petals, 5 stamens, an inferior ovary, and alternate leaves. *Campanula americana* is the only species that has a flattened instead of a bell-shaped corolla.





Local Notes:

Habitat: Moist woods, damp thickets.

Habit: Annual or biennial herbs with a taproot, usually with milky sap.

Stems: Erect, branched or unbranched, smooth or hairy, up to 6 feet tall.

Leaves: Alternate, simple, lanceolate to narrowly ovate, pointed at the tip, tapering to the base, toothed, smooth or hairy, up to 6 inches long, up to 2 inches wide.

Flowers: Several in racemes up to 1 1/2 feet long, blue, each flower about 1 inch across.

Sepals: 5, green, united at base, up to 1/2 inch long.

Petals: 5, blue, united near the base.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Capsules club-shaped, about 1/2 inch long, opening by pores near the top; seeds brown, flat.

Notes: White-tailed deer browse on the leaves of this species.

Spring Cress

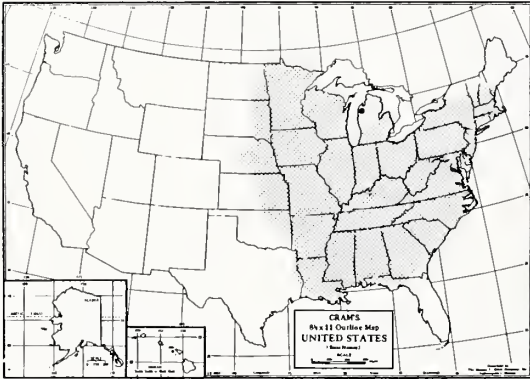
Cardamine bulbosa (Schreb.) BSP.

Family: Mustard (Brassicaceae)

March-June

Field Marks: This is the only bittercress with large flowers and untoothed or merely toothed, not deeply divided, leaves.





Local Notes:



Habitat: Low woods, wet meadows, along streams, marshes.

Habit: Perennial herbs with short, thick tubers.

Stems: Erect, usually unbranched, smooth, up to 15 inches tall.

Leaves: Of 2 kinds, the basal oblong to ovate, usually heart-shaped at base, on long leaf stalks, the leaves of the stem alternate, simple, ovate to lanceolate, pointed at the tip, tapering to the base, without teeth or with sparse teeth, smooth, up to 2 inches long, usually without leaf stalks.

Flowers: Several in terminal racemes, white, with slender stalks.

Sepals: 4, green, smooth.

Petals: 4, white, free from each other, 1/2-2/3 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Pods linear, very slender, up to 1 inch long, with a sterile beak up to 1/4 inch long; seeds dark brown, about 1/10 inch long.

Notes: The tuber of this species can be used as a substitute for horseradish. The young stems and leaves can be used fresh in salads.

Purple Cress

Cardamine douglassii (Torr.) Britt.

Family: Mustard (Brassicaceae)

March-April

Field Marks: Purple cress is the only *Cardamine* that has large pink-purple flowers and merely toothed, never deeply lobed, leaves.





Local Notes:



Habitat: Low woods, marshes.

Habit: Perennial herbs with short, thick tubers.

Stems: Erect, usually unbranched, hairy or rarely smooth.

Leaves: Of 2 kinds, the basal ones nearly orbicular, on long leaf stalks, the leaves on the stem alternate, simple, lanceolate, pointed at the tip, tapering, rounded or even clasping at the sessile base, usually toothed, smooth or slightly hairy, up to 2 inches long.

Flowers: Several in terminal racemes, pink-purple, with slender leaf stalks.

Sepals: 4, green, tinged with purple.

Petals: 4, pink-purple, free from each other, 1/3-1 inch long.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Pods linear, slender, up to 1 inch long, with a sterile beak up to 1/5 inch long; seed dark brown, about 1/12 inch long.

Lambsquarters

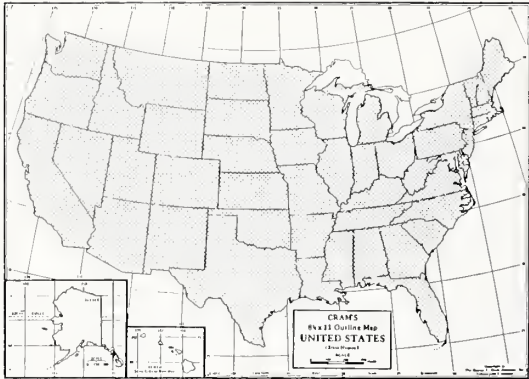
Chenopodium album L.

Family: Goosefoot (Chenopodiaceae)

May-October

Field Marks: The distinguishing features of this species are the white lower leaf surfaces and the seeds lacking a honeycomb appearance.





Local Notes:



Habitat: Disturbed soil, frequently in moist areas.

Habit: Annual herb with fibrous roots.

Stems: Erect, often branched, smooth or with short hairs, up to 4 feet tall.

Leaves: Alternate, simple, broadly lanceolate to ovate, coarsely and irregularly toothed, whitish on the lower surface, up to 5 inches long.

Flowers: Minute, crowded in several spikes that form a panicle.

Sepals: 5, whitish, very tiny.

Petals: 0.

Stamens: 5.

Pistils: Ovary superior.

Fruits: Seeds smooth, black, shiny, about 1/20 inch long.

Notes: The young parts of this plant can be cooked and eaten as a vegetable.

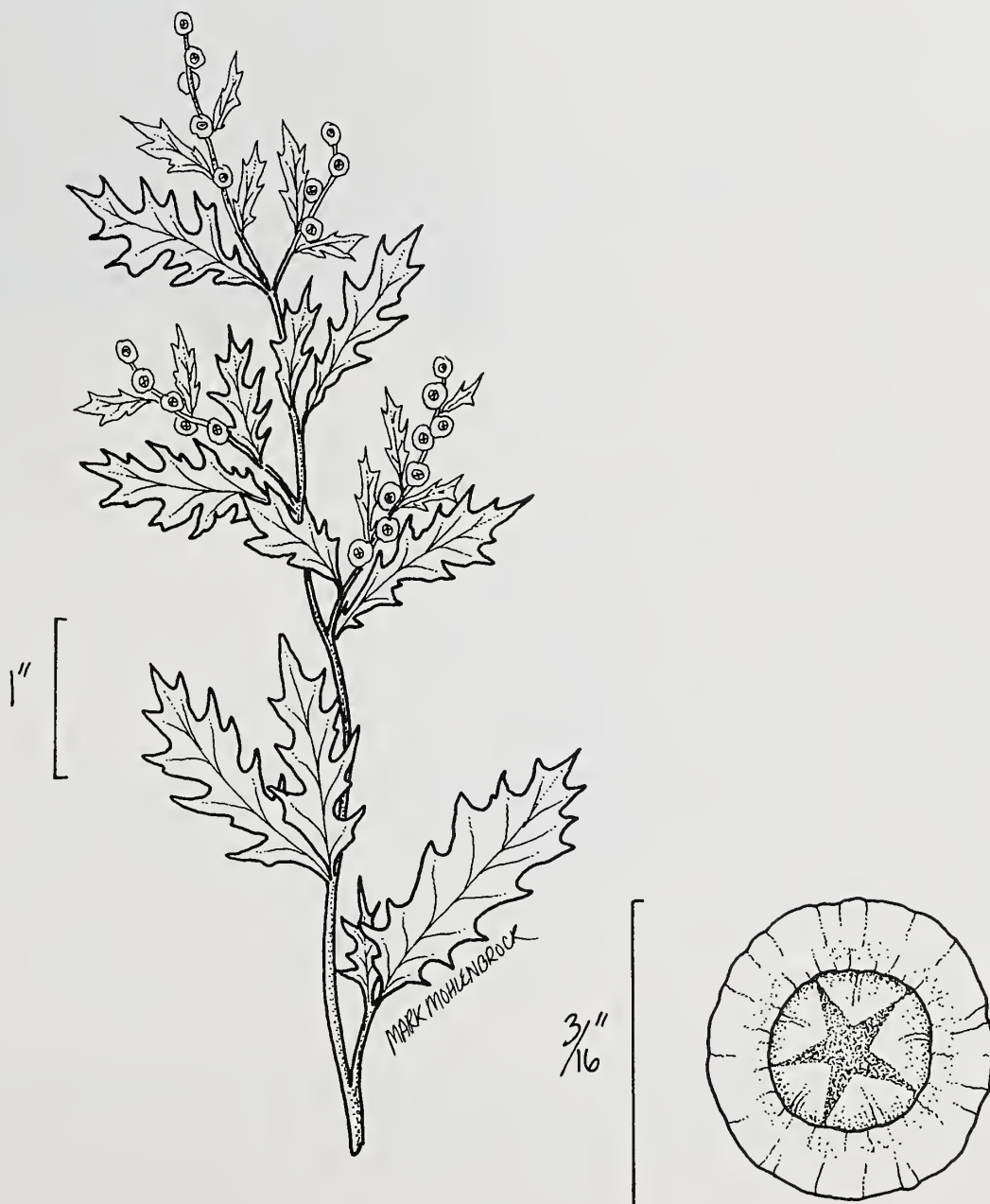
Winged Pigweed

Cycloloma atriplicifolium (Spreng.) Coult.

Family: Goosefoot (Chenopodiaceae)

June-October

Field Marks: The distinguishing feature of this sand-loving species is the fruits surrounded by circular wings.





Local Notes:



- Habitat:** Along major rivers, around large lakes, often in sand.
- Habit:** Annual herb often forming rounded tumbleweed-like mounds.
- Stems:** Spreading, much branched, up to 2 feet long.
- Leaves:** Alternate, simple, lanceolate to elliptic, pointed at the tip, tapering to the base, smooth or hairy, irregularly and coarsely toothed, up to 3 inches long, up to 3/4 inch broad.
- Flowers:** Several in short, interrupted spikes, each flower greenish, about 1/6 inch across, without a stalk.
- Sepals:** 5, greenish.
- Petals:** 0.
- Stamens:** 5.
- Pistils:** Ovary superior; styles 3.
- Fruits:** 1-seeded, surrounded by a flat, circular, nearly transparent wing about 1/6 inch across.
- Notes:** This species is also know as winged pigweed.

Purpleleaf Willowweed

Epilobium coloratum Biehler

Family: Evening Primrose (Oragraceae)

June-October

Field Marks: This willowweed is distinguished by its uncleft stigmas, its leaves with stalks, and the cinnamon-brown hairs attached to its seeds.





Local Notes:



Habitat: Wet meadows, along streams, in wet ditches.

Habit: Perennial herb with fibrous roots.

Stems: Erect, branched, hairy at least in the upper half, up to 3 feet tall.

Leaves: Opposite or a few upper ones sometimes alternate, simple, lanceolate to elliptic-lanceolate, pointed at the tip, rounded or tapering to the base, shallowly toothed, smooth or hairy, up to 3 1/2 inches long, up to 2/3 inch broad; leaf stalk very short.

Flowers: Several to numerous, borne in panicles, up to 3/4 inch long.

Sepals: 4, united below, ovate, hairy, up to 1/6 inch long.

Petals: 4, free from each other, pink or white, up to 1/6 inch long.

Stamens: 8.

Pistils: 1; ovary inferior.

Fruits: Capsules linear, up to 2 inches long, about 1/20 inch wide, hairy, brown, on stalks up to 1/2 inch long; seeds numerous, with a tuft of cinnamon-brown hairs at the tip.

Annual Fleabane

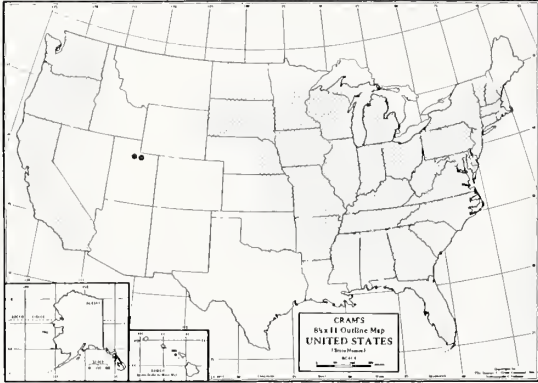
Erigeron annuus (L.) Pers

Family: Aster (Asteraceae)

May-October

Field Marks: This fleabane is distinguished by its non-clasping leaves, some of which are coarsely toothed, the spreading hairs on the stem, and its head less than 1 inch wide with numerous white rays around a yellow center.





Local Notes:



Habitat: Old fields, roadsides.

Habit: Coarse annual herb with fibrous roots.

Stems: Erect, branched, up to 5 feet tall, usually with spreading hairs.

Leaves: Alternate, simple, elliptic to lanceolate to narrowly ovate, pointed at the tip, tapering to the base, the lower ones coarsely toothed, the upper ones usually not toothed, hairy, up to 4 inches long, up to 2 inches broad, never clasping the stem.

Flowers: Many crowded into a head with several heads per plant, each head up to 3/4 inch across and subtended by many narrow, hairy, green bracts, the outer flowers 80-125, white, ray-like the inner yellow, tubular, forming a disk.

Sepals: 0.

Petals: Some white, very narrow, ray-like, others yellow, 5-parted, forming a disk.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes pale brown, shiny, about 1/20 inch long, with a tuft of white bristles.

Notes: The vegetative parts of this species are eaten by white-tailed deer.

Philadelphia Fleabane

Erigeron philadelphicus L.

Family: Aster (Asteraceae)

April-June

Field Marks: Philadelphia fleabane has some of its leaves clasping and about 100 very narrow pinkish or white rays per head.





Local Notes:



Habitat: Meadows, along streams, roadsides, ditches.

Habit: Perennial herb with creeping stolons.

Stems: Erect, sometimes branched, usually hairy, up to 2 feet tall.

Leaves: Alternate and basal, simple, hairy, the basal leaves elliptic to oblanceolate, rounded or pointed at the tip, tapering to the base, toothed, hairy, up to 6 inches long, up to 2 inches broad, the leaves on the stem similar but smaller and some of them clasping the stem.

Flowers: Many crowded into a head with several heads per plant, each head up to 1 1/2 inches across and subtended by many narrow, hairy, green bracts, the outer flowers about 100, pink or sometimes white and ray-like, the inner yellow, tubular, forming a disk.

Sepals: 0.

Petals: Some pink or white, narrow, ray-like, others yellow, 5-parted, forming a disk.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes 1/20 inch long, with a tuft of white bristles.

Notes: White-tailed deer feed on the leaves and stems of this species.

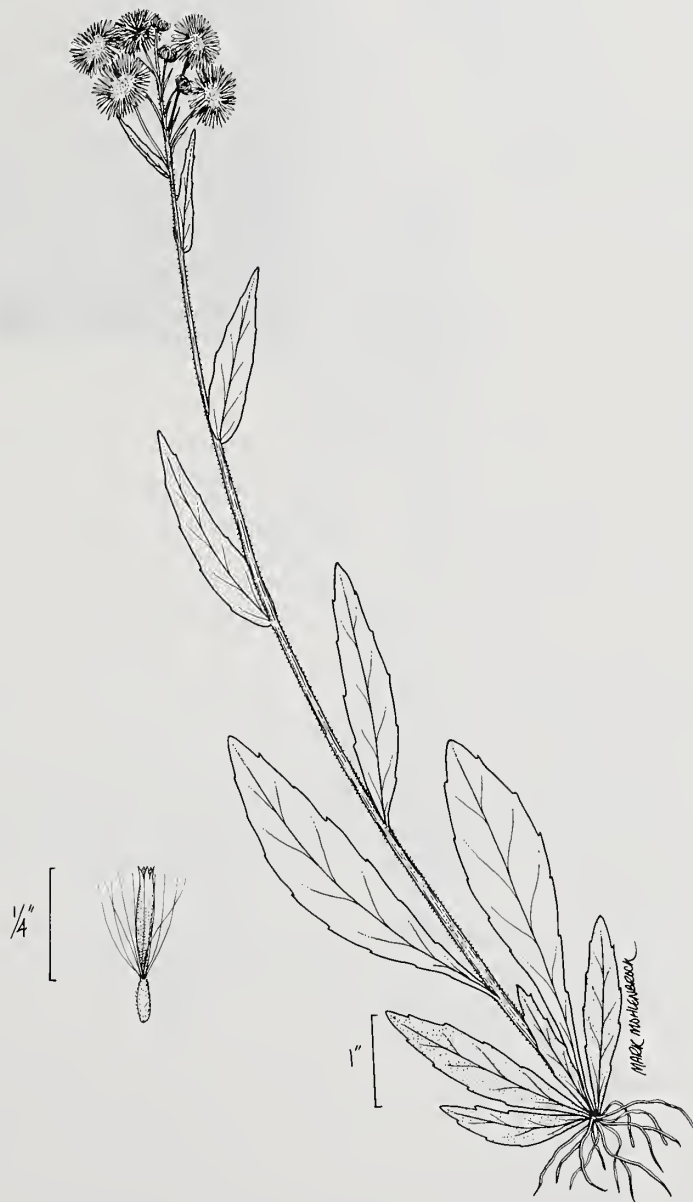
Robin's Plantain

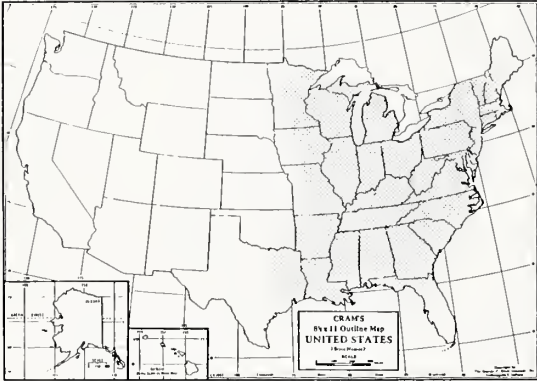
Erigeron pulchellus Michx.

Family: Aster (Asteraceae)

April-June

Field Marks: This fleabane differs from others by its fewer rays (about 50-60) per head which are longer than the rays of other species.





Local Notes:

Habitat: Along streams.

Habit: Perennial herbs with creeping stolons.

Stems: Erect, sometimes branched, hairy, up to 1 1/2 feet tall.

Leaves: Alternate and basal, simple, hairy, the basal oblanceolate to obovate, short-pointed to rounded at the tip, tapering to the base, toothed, up to 6 inches long, up to 2 1/2 inches broad, the leaves on the stem lanceolate, pointed at the tip, rounded or tapering to the base, toothed, smaller than the basal leaves.

Flowers: Many crowded into a head, with 1 to a few heads per plant, each head up to 2 1/2 inches across and subtended by narrow, hairy, green bracts, the outer flowers about 50-60, white, ray-like, the inner yellow, tubular, forming a disk.

Sepals: 0.

Petals: Some white, narrow, ray-like, up to 1 inch long, others yellow, 5-parted, forming a disk.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes greenish brown, shiny, 1/20-1/10 inch long, with a tuft of white hairs.

Rough Fleabane

Erigeron strigosus Muhl.

Family: Aster (Asteraceae)

April-October

Field Marks: This fleabane is distinguished by its non-clasping leaves, the lack of spreading hairs on the stem, and its heads less than 1 inch wide with numerous white rays around a central disk.





Local Notes:



Habitat: Old fields, roadsides.

Habit: Coarse annual herb with fibrous roots.

Stems: Erect, branched, up to 5 feet tall, with appressed hairs or smooth.

Leaves: Alternate, simple, linear-lanceolate to elliptic, pointed at the tip, tapering to the base, sparingly toothed or the upper ones without teeth, usually somewhat hairy, less than 1 inch broad.

Flowers: Many crowded into a head with several heads per plant, each head up to 3/4 inch across and subtended by many narrow, usually hairy green bracts, the outer flowers 90-110, white, ray-like, the inner yellow, tubular, forming a disk.

Sepals: 0.

Petals: Some white, very narrow, ray-like, others yellow, 5-parted, forming a disk.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes pale brown, shiny, hairy, about 1/20 inch long, with a tuft of white bristles.

Notes: White-tailed deer browse on this species.

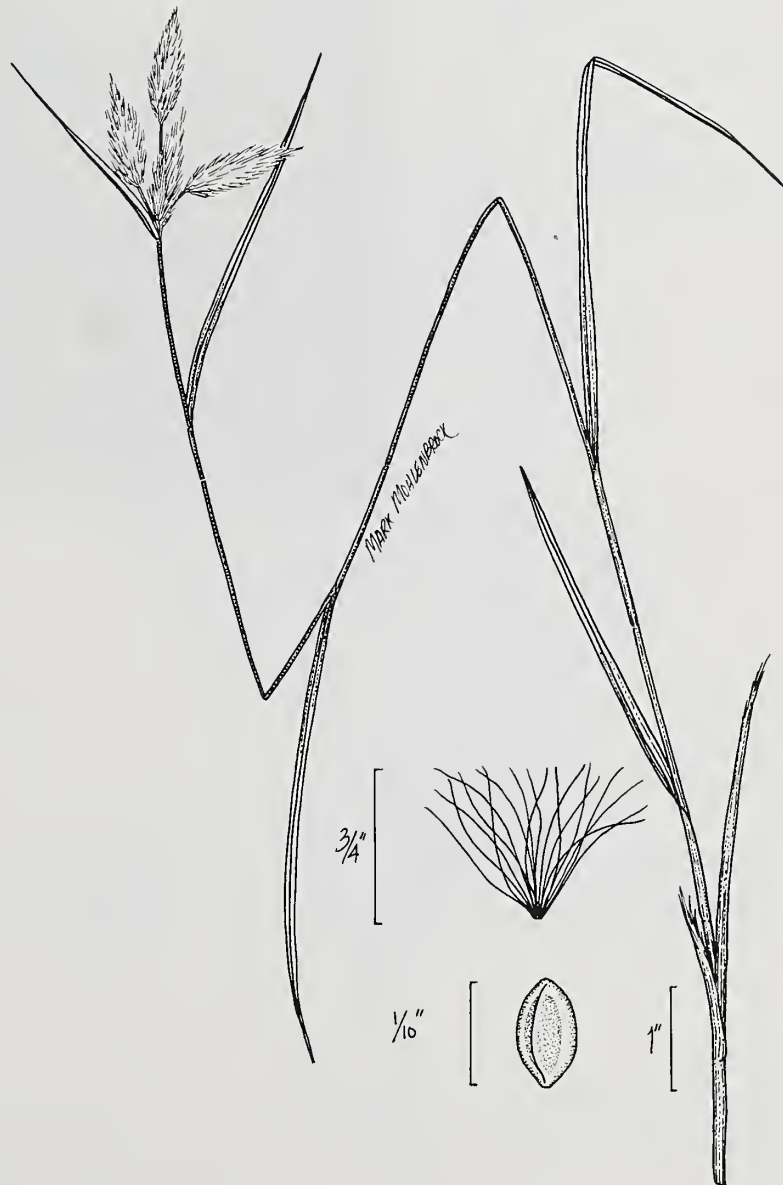
Narrowleaved Cottonsedge

Eriophorum angustifolium Honck.

Family: Sedge (Cyperaceae)

June-August

Field Marks: Cottonsedges are distinguished by their cottony fruiting heads. Narrowleaved cottonsedge has several heads per plant, flat leaves, and merely pointed scales.





Local Notes:

Habitat: Bogs.

Habit: Perennial herb.

Stems: Erect, stiff, smooth, somewhat triangular, up to 2 feet tall.

Leaves: Long, narrow, flat, rough along the edges, up to 1/6 inch broad.

Flowers: 1 per spikelet, with many spikelets forming a head and several heads per plant; scales ovate-lanceolate, pointed, green or brown; bristles numerous, white, appearing cottony, up to 1 inch long.

Sepals: 0.

Petals: 0.

Stamens: Usually 3.

Pistils: 1; styles 3; ovary superior.

Fruits: Achenes obovoid, pale brown, 1/10-1/6 inch long.

Grass-leaved Goldenrod

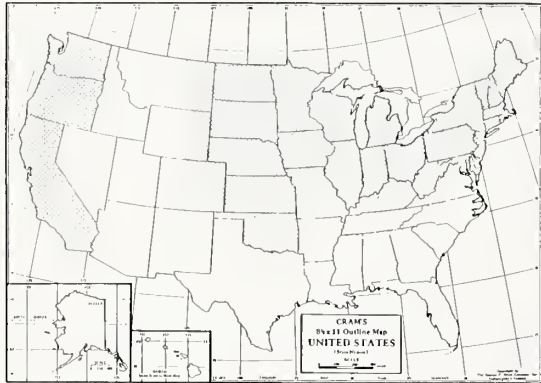
Euthamia graminifolia (L.) Nutt.

Family: Aster (Asteraceae)

July-October

Field Marks: This is one of the narrow-leaved goldenrods with more or less flat-topped flower clusters. It differs from other similar species by having three main veins in the leaves.





Local Notes:



Habitat: Fallow fields, wet prairies.

Habit: Perennial herb with long, slender rhizomes.

Stems: Erect, branched, hairy, up to 5 feet tall.

Leaves: Alternate, simple, linear to elliptic, pointed at the tip, tapering to the base, without teeth, smooth or rough on the upper surface, hairy on the lower surface, up to 4 inches long, up to 1/2 inch wide, with 3 main veins.

Flowers: Several crowded into a head with many heads forming a branched, more or less flat-topped inflorescence, each head up to 1/4 inch across, subtended by several narrow, green, somewhat sticky bracts, the outer flowers 15-25, yellow, ray-like, the inner flowers yellow and tubular.

Sepals: 0.

Petals: The outer yellow, ray-like, about 1/8 inch long, the inner yellow, tubular, 5-parted.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes 1/30 inch long, hairy, with a tuft of very short bristles.

Sneezeweed

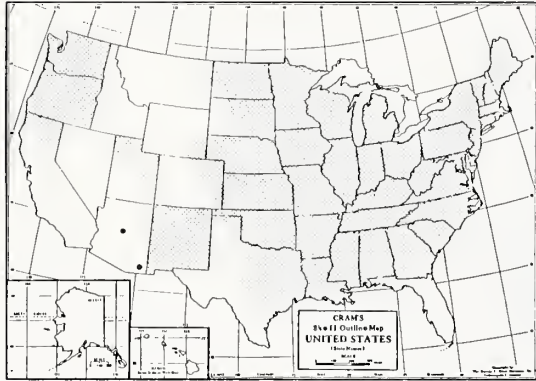
Helenium autumnale L.

Family: Aster (Asteraceae)

August-November

Field Marks: This sneezeweed differs by its flower heads with yellow centers and its lanceolate to elliptic leaves.





Local Notes:



Habitat: Along streams, around ponds and lakes, roadside ditches, wet meadows, prairies, low woods.

Habit: Perennial herb with fibrous roots.

Stems: Erect, branched or unbranched, smooth, sometimes slightly winged, up to 4 feet tall.

Leaves: Alternate, simple, elliptic to lanceolate, pointed at the tip, tapering to the base, with or without fine teeth, smooth, up to 6 inches long, up to 1 1/2 inches broad; basal leaves absent at flowering time.

Flowers: Many crowded into a head with several heads per plant, each head up to 2 1/2 inches across and subtended by numerous very narrow, pointed, hairy bracts; the outer flowers yellow and ray-like, often pointing downward; the inner yellow, tubular, forming a round disk up to 3/4 inch across.

Sepals: 0.

Petals: Some yellow, 3-notched at the tip, ray-like, 10-22 in number; others purple, 5, united to form a short tube.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes hairy with short brown bristles at the tip.

Notes: The flower heads of this species are reported to be poisonous to livestock.

Purple-headed Sneezeweed

Helenium flexuosum Raf.

Family: Aster (Asteraceae)

May-August

Field Marks: *Helenium flexuosum* is distinguished by its yellow heads with a purple center and its winged stems.





Local Notes:



Habitat: Wet meadows, fallow fields, roadside ditches.

Habit: Perennial herb with fibrous roots.

Stems: Erect, branched or unbranched, winged, smooth or hairy, up to 3 feet tall.

Leaves: Alternate and basal, simple, the basal elliptic, pointed at the tip, tapering to the base, usually sparsely toothed, smooth or hairy, up to 3 inches long, up to 1 inch broad; the stem leaves similar but smaller.

Flowers: Many crowded into a head with several heads per plant, each head up to 2 inches across and subtended by narrow, pointed, hairy bracts; the outer flowers yellow and ray-like, often pointing downward; the inner purple, tubular, forming a round disk up to 1/2 inch across.

Sepals: 0.

Petals: Some yellow, 3-notched at the tip, ray-like, 15-25 in number; others purple, 5, united to form a short tube.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes hairy, with a few scale-like teeth at the tip.

Notes: The achenes are eaten by wildlife.

Cowparsnip

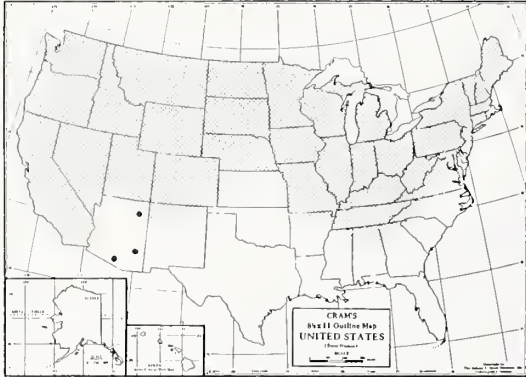
Heracleum lanatum Michx.

Family: Carrot (Apiaceae)

May-July

Field Marks: This species is distinguished from all other white-flowered members of the family by its stout growth form and its huge, hairy, palmately lobed leaves. The seeds are marked with 4 vertical purple lines.





Local Notes:

Habitat: Along streams, lowland woods.

Habit: Coarse biennial herb with a taproot.

Stems: Erect, branched, rough-hairy, hollow, up to 8 feet tall.

Leaves: Pinnately divided or palmately cleft, alternate, ovate, rough-hairy, coarsely toothed, up to 1 1/2 feet long, with a broad wing at the base of the leaf stalk.

Flowers: Many borne in large, many-rayed umbels; each umbel subtended by very narrow bracts up to 1 inch long; some of the flowers with stamens only.

Sepals: 5, green, minute.

Petals: 5, white, free from each other, not all the same size, up to 1/3 inch long.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Flat, obovate, smooth or nearly so, with 4 conspicuous vertical purple lines.

Halberd-leaved Rosemallow

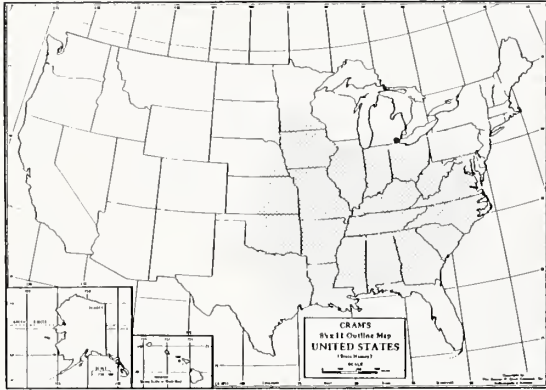
Hibiscus laevis All.

Family: Mallow (Malvaceae)

July-September

Field Marks: This large-flowered rosemallow has some of its leaves lobed near the base.





Local Notes:



Habitat: Along streams, around ponds and lakes, in sloughs, roadside ditches, sometimes in shallow standing water.

Habit: Robust perennial herb.

Stems: Erect, unbranched, smooth to hairy, up to 6 feet tall.

Leaves: Alternate, simple, ovate, pointed at the tip, sometimes with a pair of lobes at the base, toothed, hairy on the lower surface, up to 10 inches long.

Flowers: Solitary from the axils of the leaves, usually white with a dark rose center, up to 4 inches long, borne on a stalk up to 6 inches long.

Sepals: 5, green.

Petals: 5, white with a dark rose base, free from each other.

Stamens: Numerous, attached to a central column in the flower.

Pistils: Ovary superior; stigmas 5, protruding from the central column in the flower.

Fruits: Capsule ovoid, containing many seeds.

Notes: This species used to be known as *H. militaris*. The seeds are eaten by waterfowl and bobwhite quail.

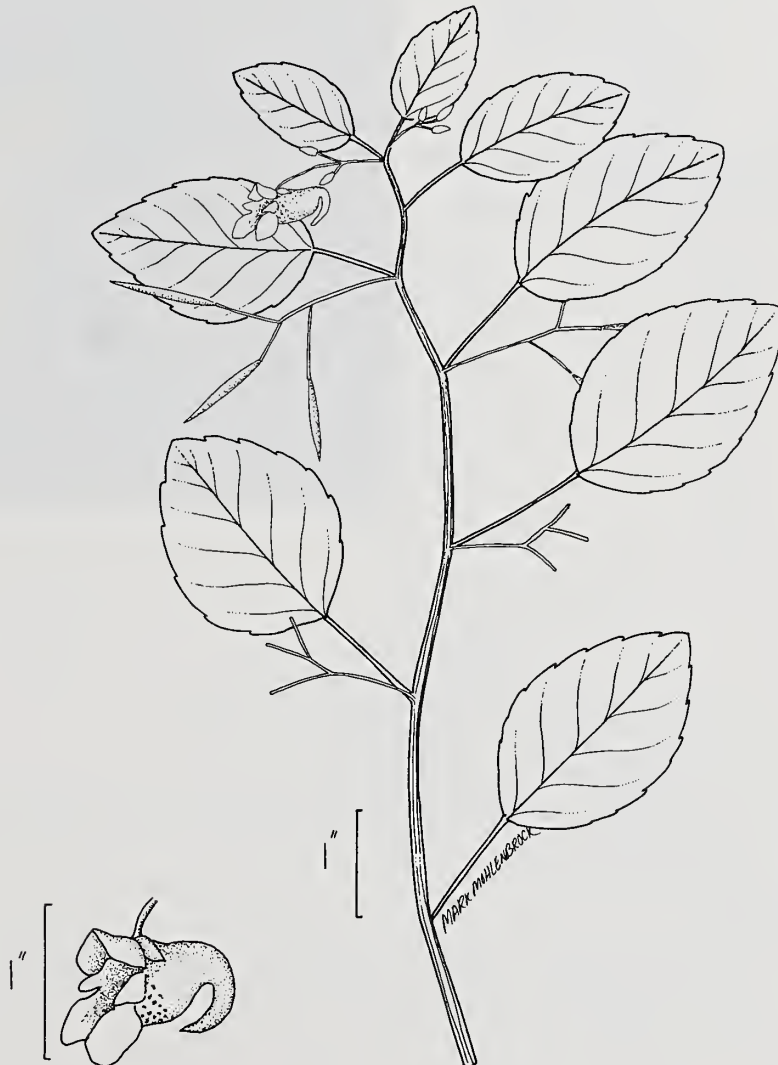
Spotted Touch-me-not

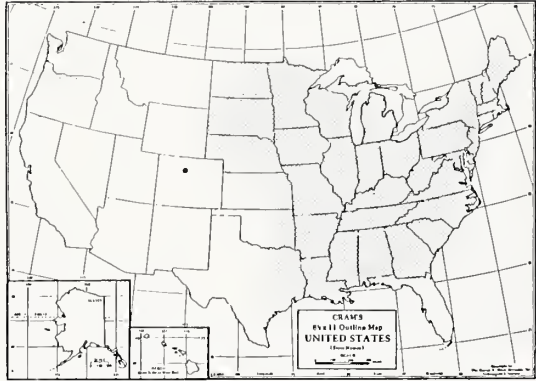
Impatiens capensis Meerb.

Family: Jewelweed (Balsaminaceae)

May-October

Field Marks: The orange, spotted flowers serve to distinguish this species from others in the genus.





Local Notes:



Habitat: Low woods, along streams.

Habit: Annual succulent herbs with fibrous roots.

Stems: Erect, branched, smooth, up to 8 feet tall.

Leaves: Alternate, simple, ovate to elliptic, toothed, smooth, up to 3 inches long, sometimes on stalks longer than the blades.

Flowers: 1-few from the axils of the leaves, orange and spotted with red-brown, on slender, drooping stalks.

Sepals: 3, two of them small and green, the other one orange and projected backward into a curved spur up to 1/3 inch long.

Petals: Orange spotted with red-brown, apparently 3 in number.

Stamens: 5.

Pistils: Ovary superior.

Fruits: Capsules up to 1 inch long, splitting open elastically and expelling the seeds.

Notes: The juice from this species counteracts the effect of poison ivy in some persons. The flowers are very attractive to hummingbirds.

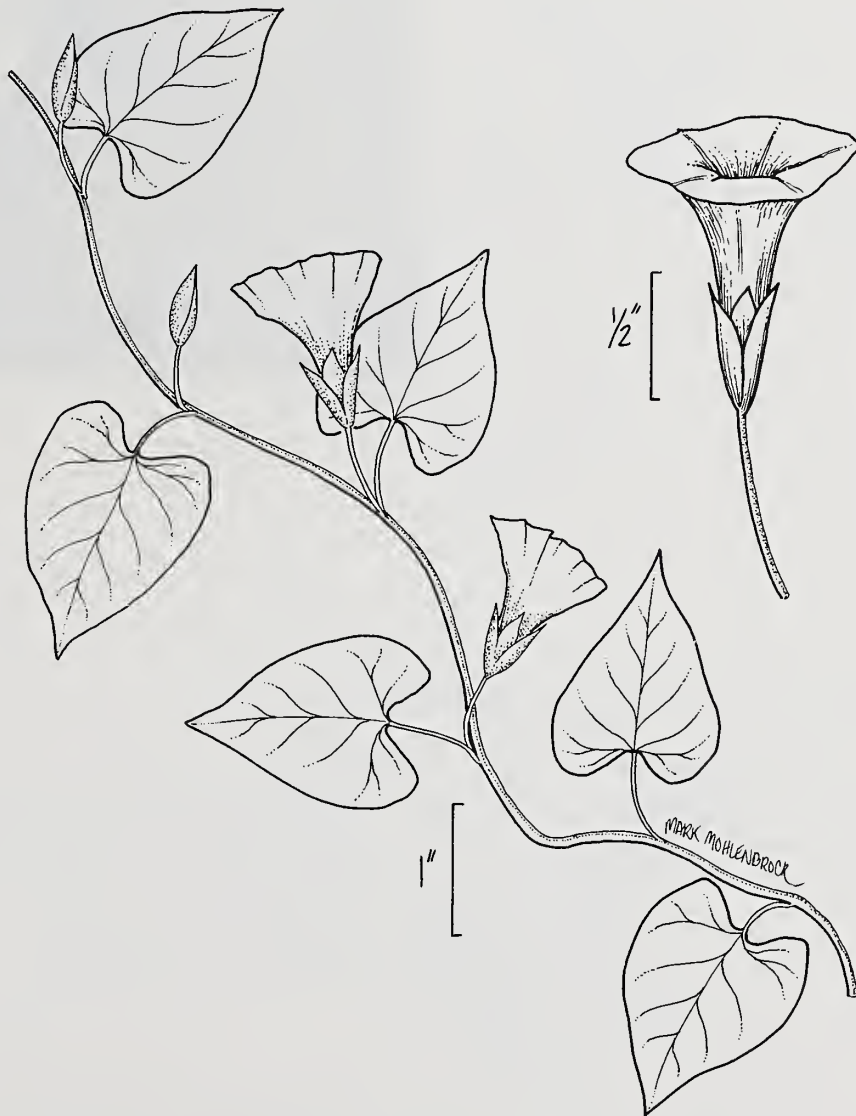
Small White Morning-glory

Ipomoea lacunosa L.

Family: Morning-glory (Convolvulaceae)

July-October

Field Marks: This morning-glory has small, white flowers less than 1 inch long and usually smooth leaf and flower stalks, and leaves with a narrow maroon border.





Local Notes:



Habitat: Wet prairies, along streams, wet meadows, roadsides.

Habit: Annual vine with slender roots.

Stems: Trailing or climbing, smooth or sparsely hairy, up to 10 feet long.

Leaves: Alternate, simple, ovate, pointed at the tip, heart-shaped at the base, without teeth, smooth or sparsely hairy, with a narrow maroon border, up to 4 inches long, up to 3 inches broad.

Flowers: 1-3 on long, usually smooth stalks, each flower white, up to 1 inch across.

Sepals: 5, green, lanceolate to ovate, up to 1/2 inch long, with ciliate margins.

Petals: 5, united to form a bell-shaped corolla, white, up to 1 1/4 inches long.

Stamens: 5, not exserted beyond the corolla.

Pistils: Ovary superior.

Fruits: Capsules nearly spherical, 1/3-1/2 inch long, sparsely hairy at the top.

Canada Woodnettle (Stinging Nettle)

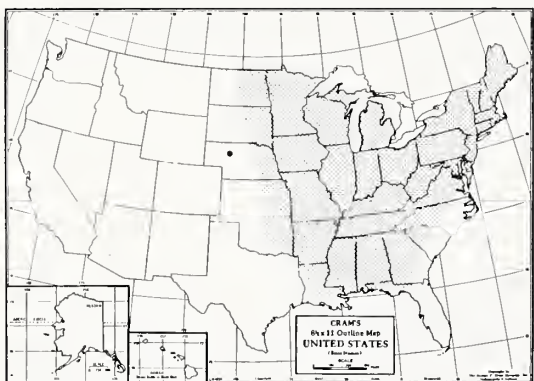
Laportea canadensis (L.) Weddell

Family: Nettle (Urticaceae)

May-August

Field Marks: This nettle is distinguished by its stinging hairs and alternate leaves.





Local Notes:



Habitat: Low woods, along streams.

Habit: Perennial herbs from thickened rootstocks.

Stems: Erect, branched or unbranched, with stinging hairs, up to 2 1/2 feet tall.

Leaves: Alternate, simple, ovate, pointed at the tip, rounded at the base, coarsely toothed, hairy, up to 6 inches long.

Flowers: Many tiny flowers crowded into branched clusters, the male flowers separate from the female flowers, but usually on the same plant, each flower greenish white, up to 1/12 inch long.

Sepals: 4-5, green, free from each other.

Petals: 0.

Stamens: Usually 4.

Pistils: Ovary superior.

Fruits: Achenes flat, asymmetrical, nodding on a winged stalk, up to 1/6 inch long.

Notes: The hairs on the stem contain an acid that is very irritating to the skin.

Cardinal Flower

Lobelia cardinalis L.

Family: Bellwort (Campanulaceae)

July-October

Field Marks: This species is readily recognized by its bright red, 2-lipped flowers.





Local Notes:



Habitat: Marshes, wet meadows, low woods, along streams, around ponds and lakes, wet prairies.

Habit: Perennial herb from fibrous roots.

Stems: Erect, branched or unbranched, usually hairy, up to 6 feet tall, with milky sap.

Leaves: Alternate, simple, elliptic to lanceolate, pointed at the tip, tapering to the base, toothed, usually hairy, up to 8 inches long, up to 2 1/2 inches broad.

Flowers: Several crowded into racemes up to 15 inches long; each flower bright red, up to 2 inches long, on short stalks.

Sepals: 5, green, very narrow, up to 1 inch long.

Petals: 5, bright red, 2-lipped; the upper lip 2-lobed; the lower lip 3-lobed.

Stamens: 5, united.

Pistils: Ovary inferior.

Fruits: Capsules ovoid to spherical, up to 1/2 inch across, opening at the tip; seeds yellow-brown, warty, 1/20 inch long.

Bigblue Lobelia

Lobelia siphilitica L.

Family: Bellwort (Campanulaceae)

August-September

Field Marks: This *Lobelia* differs by its inch long blue flowers and its sepals cleft about halfway down the cup.





Local Notes:



Habitat: Along streams, around ponds and lakes, in sloughs, wet meadows, wet prairies, roadside ditches.

Habit: Perennial herb from fibrous roots.

Stems: Erect, usually branched, smooth or hairy, up to 4 feet tall, with milky sap.

Leaves: Alternate, simple, oblong to elliptic, pointed at the tip, tapering to the base, toothed, smooth or hairy, up to 5 inches long.

Flowers: Several crowded into terminal racemes up to 10 inches long, blue, up to 1 inch long, on short stalks.

Sepals: 5, green, united below for about half their length.

Petals: 5, blue, 2-lipped, the upper lip 2-lobed, the lower lip 3-lobed.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Capsules opening at the top.

Notes: The leaves and stems are browsed upon by white-tailed deer.

Seedbox

Ludwigia alternifolia L.

Family: Evening Primrose (Onagraceae)

June-August

Field Marks: This erect *Ludwigia* is distinguished by its alternate leaves and short-stalked square capsules.





Local Notes:



Habitat: Along streams, around ponds, low woods, wet prairies, wet meadows, fallow fields, roadside ditches.

Habit: Perennial herb with a cluster of thickened roots.

Stems: Erect, branched, smooth, up to 3 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, without teeth, smooth or hairy, up to 4 inches long.

Flowers: Yellow, about 1/2 inch across, solitary in the axils of the leaves.

Sepals: 4, green, united to form a cup.

Petals: 4, yellow, free from each other.

Stamens: 4.

Pistils: Ovary inferior.

Fruits: Capsule more or less square, up to 1/4 inch across, angled or narrowly winged, containing many seeds.

Notes: The plants are browsed by wildlife.

Winged Lythrum

Lythrum alatum Pursh

Family: Loosestrife (Lythraceae)

June-September

Field Marks: Purple flowers with usually 6 free petals, a 4-angled stem, and leaves both alternate, opposite, or even whorled distinguish this species from all others.





Local Notes:



Habitat: Marshes, wet prairies, margins of streams, ponds, and ditches, wet meadows, damp areas in rocky glades.

Habit: Herbaceous perennials from tufted roots.

Stems: 1-several, erect, stiffly branching, smooth, 4-angled, up to 3 1/2 feet tall.

Leaves: Upper usually alternate, lower usually opposite or even whorled, simple, linear to broadly lanceolate, pointed at the tip, more or less rounded at the base, the largest up to 2 inches long, without teeth, smooth.

Flowers: Solitary in the axils of the upper leaves, purple, with very short stalks.

Sepals: Usually 6, green, united below to form a tube as long as or longer than the petals.

Petals: Usually 6, purple, free from each other, up to 1/4 inch long.

Stamens: Usually 6, sometimes protruding above the petals, sometimes not.

Pistils: Ovary superior.

Fruits: Capsules somewhat longer than broad, with numerous minute seeds.

Notes: The seeds may be eaten by waterfowl.

Tiny Mouse-tail

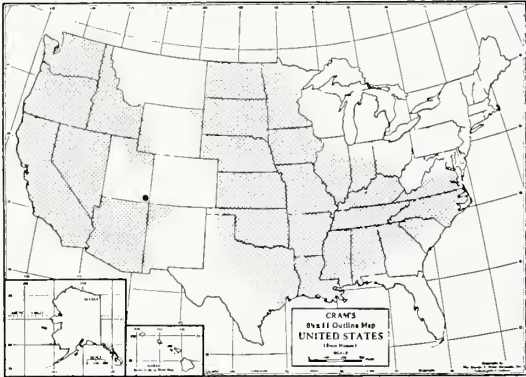
Myosurus minimus L.

Family: Buttercup (Ranunculaceae)

March-May

Field Marks: This easily recognized tiny annual has five pale yellow petals at the base of an elongated green receptacle that bears the pistils.





Local Notes:



Habitat: Fallow fields, pastures, disturbed soil.

Habit: Annual herb with fibrous roots.

Stems: Erect, smooth, up to 6 inches tall, bearing only a single flower.

Leaves: All basal, linear, smooth, rounded at the tip, about 1/10 inch broad.

Flowers: Solitary on a leafless stalk.

Sepals: 5, greenish, free from each other, up to 1/6 inch long, with a tiny prolonged spur.

Petals: 5, yellow, free from each other, up to 1/6 inch long.

Stamens: 5-20.

Pistils: Several on an elongated receptacle, the receptacle becoming up to 2 1/2 inches long at maturity; ovary superior.

Fruits: Achenes flat, smooth, 1/20-1/12 inch long, with a short beak.

Common Evening Primrose

Oenothera biennis L.

Family: Evening Primrose (Onagraceae)

June-October

Field Marks: Common evening primrose lacks a 4-sided ovary and capsule, has angular seeds, and calyx lobes adhering to each other.





Local Notes:



Habitat: Old fields, roadside ditches.

Habit: Coarse perennial herbs with a taproot.

Stems: Erect, branched, hairy, up to 5 feet tall.

Leaves: Alternate, simple, lanceolate to oblong, pointed at the tip, tapering to the base, with or without small teeth, hairy, up to 6 inches long, up to 2 inches broad.

Flowers: Several in terminal clusters, yellow, up to 2 inches across.

Sepals: 4, green, hairy, usually adhering to each other and forming a long tube.

Petals: 4, free, yellow, up to 1 1/4 inches long, opening in the evening.

Stamens: 8.

Pistils: Ovary inferior; stigmas 4.

Fruits: Capsules cylindrical, not winged, usually hairy, up to 2 inches long; seeds reddish, 1/12-1/10 inch long.

Notes: Roots and leaves of the young plants are eaten by wildlife and may be eaten by humans.

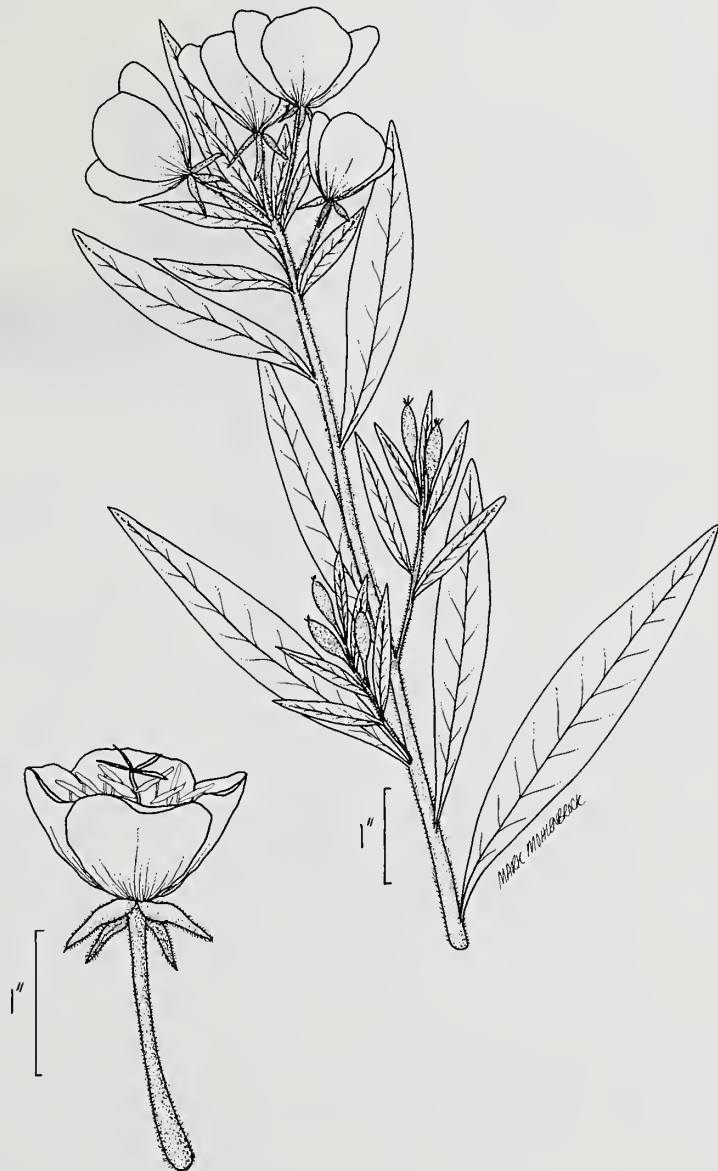
Prairie Sundrops

Oenothera pilosella Raf.

Family: Evening Primrose (Onagraceae)

May-July

Field Marks: This species has a 4-sided ovary, a 4-sided capsule, large yellow flowers, and spreading hairs on the sepals.





Local Notes:

Habitat: Fallow fields, wet prairies, roadside ditches.

Habit: Perennial herbs with fibrous roots.

Stems: Erect, sometimes branched, with spreading hairs, up to 2 feet tall.

Leaves: Alternate, simple, lanceolate to elliptic, pointed at the tip, tapering to the base, with minute teeth or toothless, hairy, up to 4 inches long, up to 1 1/2 inches broad.

Flowers: Several in terminal clusters, bright yellow, showy, up to 2 1/2 inches across.

Sepals: 4, green, hairy, up to 3/4 inch long, united below to form a long tube.

Petals: 4, yellow, free from each other, up to 1 1/4 inches long.

Stamens: 8.

Pistils: Ovary inferior; stigmas 4.

Fruits: Capsule 4-angled, usually hairy, up to 2/3 inch long.

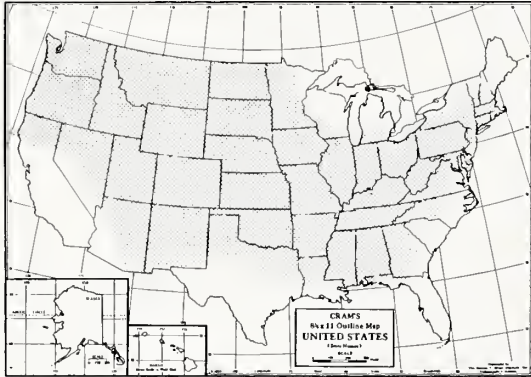
Pennsylvania Pellitory
Parietaria pensylvanica Muhl.

Family: Nettle (Urticaceae)

May-October

Field Marks: Pellitory is recognized by its long-tapering alternate leaves, the lack of stinging hairs on the stems, and the small axillary clusters of green flowers.





Local Notes:



Habitat: Moist soil in woods, under overhanging bluffs.

Habit: Annual herbs with a tuft of roots.

Stems: Erect or sprawling, branched or unbranched, hairy, up to 15 inches tall.

Leaves: Alternate, simple, lanceolate to oblong-lanceolate, long-tapering to a rounded tip, tapering to the base, hairy, without teeth, very thin, up to 2 1/2 inches long.

Flowers: Several flowers crowded into small axillary clusters, some of the flowers perfect, some male only, some female only, all often in the same cluster on the same plant, each flower green, about 1/12 inch long, surpassed by bracts.

Sepals: 4, green, united below.

Petals: 0.

Stamens: 4.

Pistils: Ovary superior.

Fruits: Achenes ovoid, smooth, shiny, about 1/20 inch long.

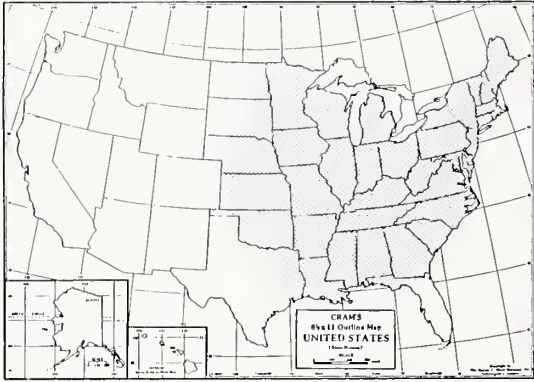
Ditch-stonecrop
Penthorum sedoides L.

Family: Sedum (Crassulaceae)

July-September

Field Marks: This species is recognized by its 5 pistils united halfway to the middle, 10 stamens, and the absence of petals.





Local Notes:



Habitat: Fallow fields, along streams, around ponds and lakes, sloughs, swamps, ditches.

Habit: Perennial herb with slender rhizomes.

Stems: Erect, branched or unbranched, smooth except for some hairs near the flowers, up to 1 foot tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, toothed, usually smooth, up to 3 inches long.

Flowers: Several in terminal clusters, greenish, up to 1/4 inch long.

Sepals: 5, greenish.

Petals: 0.

Stamens: 10.

Pistils: 5, united from about the middle to the base, the ovaries superior.

Fruits: A cluster of 5 spreading follicles, up to 1/4 inch long, becoming reddish at maturity.

Notes: The follicles are eaten by waterfowl.

Coville's Phacelia

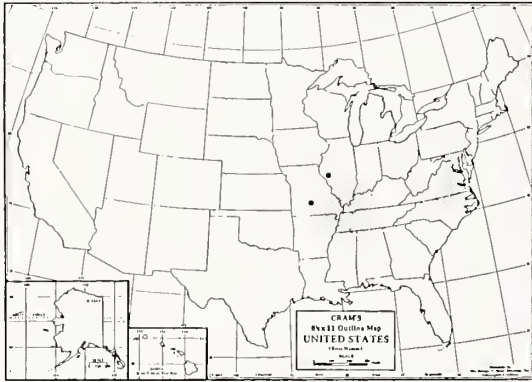
Phacelia ranunculacea (Nutt.) Constance

Family: Waterleaf (Hydrophyllaceae)

April-May

Field Marks: This small wetland annual has tiny flowers only 1/16 inch across and leaf stalks as long as the leaf blades.





Local Notes:



Habitat: Low woods, along streams.

Habit: Annual with fibrous roots.

Stems: Spreading to ascending, hairy, very slender, branched or unbranched, up to 10 inches tall.

Leaves: Alternate, oblong, pinnately divided into 3-7 lobes, hairy, up to 1 inch long; basal leaves sometimes present and undivided; all leaves on long, slender, hairy leaf stalks.

Flowers: 2-6 in small cluster, white to bluish, up to 1/6 inch across.

Sepals: 5, green, linear, hairy, nearly free from each other.

Petals: 5, white or bluish, united to form a short tube.

Stamens: 5, not exerted beyond the petals.

Pistils: Ovary superior; style 2-cleft.

Fruits: Capsules spherical, 4-seeded; seeds about 1/8 inch long.

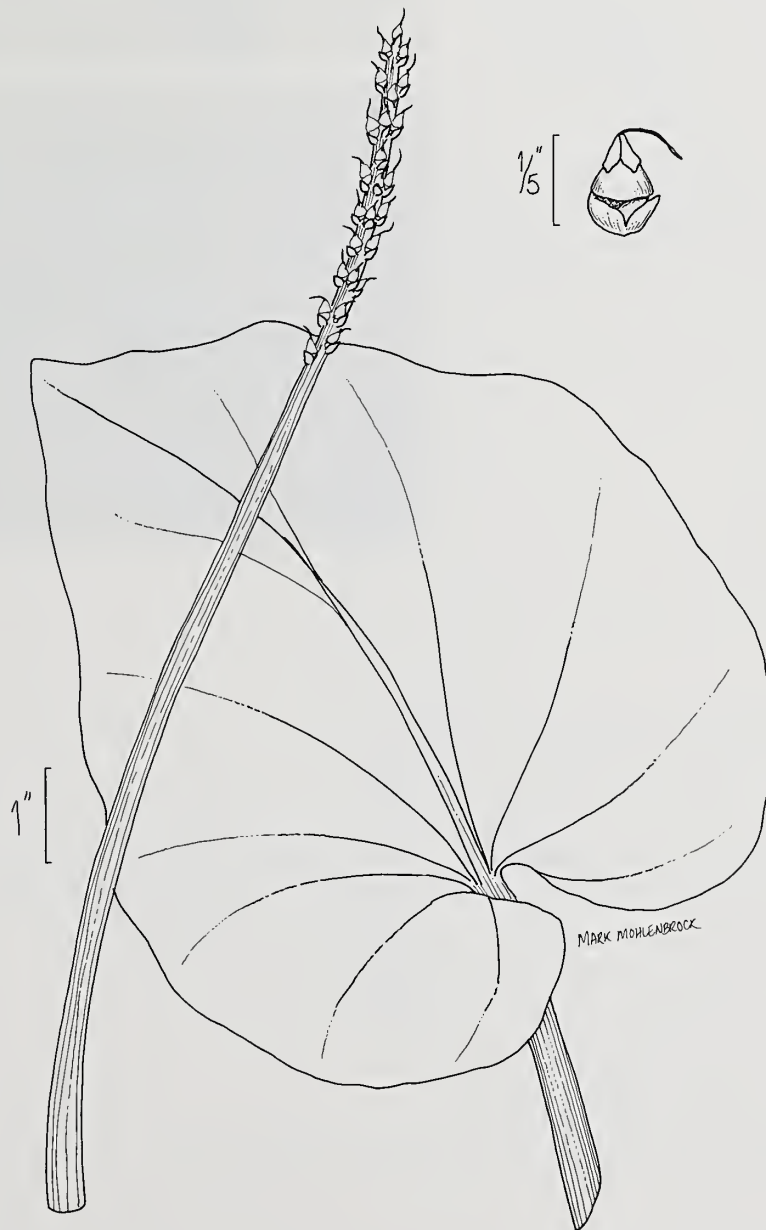
Heartleaf Plantain

Plantago cordata Lam.

Family: Plantain (Plantaginaceae)

April-June

Field Marks: This native plantain is easily recognized by the heart-shaped leaves with distinct veins that arise from the midvein and by its hollow flowering stalk.





Local Notes:

Habitat: Rocky streams, sloughs, wet woods.

Habit: Aquatic perennial herbs with fleshy roots.

Stems: Up to 15 inches tall, smooth, hollow, bearing only flowers.

Leaves: All basal, ovate to oval, pointed at the tip, heart-shaped at the base, with or without a few teeth, smooth, with distinct lateral veins, up to 10 inches long, usually with a purple leaf stalk.

Flowers: Several in a slender spike, each flower subtended by a bract.

Sepals: 4, united at base, rounded or pointed at tip, 1/10-1/8 inch long.

Petals: 4, united below, papery, up to 1/6 inch long.

Stamens: 4, exserted beyond the petals.

Pistils: Ovary superior; stigmas 2-parted.

Fruits: Capsules ovoid, smooth, about 1/6 inch long, with 4 seeds.

Stinkweed

Pluchea camphorata (L.) DC.

Family: Aster (Asteraceae)

July-September

Field Marks: This member of the aster family has purple or pink heads that consist only of tubular flowers. The leaves of this plant have a bad odor when bruised.





Local Notes:



Habitat: Wet meadows, wet prairies, swamps, sloughs, along streams.

Habit: Annual or perennial herb with fibrous roots.

Stems: Erect, branched, smooth or sparsely hairy, up to 6 feet tall.

Leaves: Alternate, simple, lanceolate to elliptic, pointed at the tip, tapering to the base, toothed, smooth or sparsely hairy, producing a bad odor when bruised, up to 5 inches long, up to 3 inches broad.

Flowers: Many crowded into a head, with numerous heads forming branched, round-topped clusters; each head purple or pink, 1/6-1/4 inch long, subtended by narrow, pointed bracts, all the flowers tubular.

Sepals: 0.

Petals: 5, united below to form a short tube, purple or pink.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes pale brown or even pinkish, hairy, up to 1/20 inch long.

Notes: This species is also known as marsh fleabane.

Water Smartweed

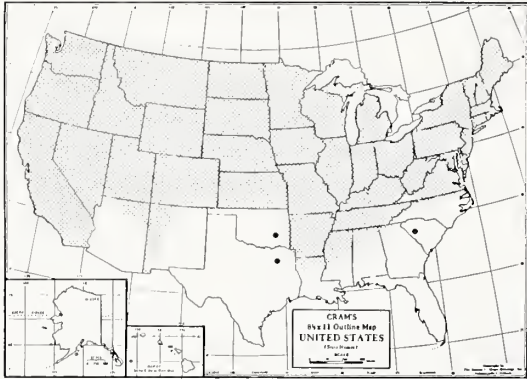
Polygonum amphibium L.

Family: Smartweed (Polygonaceae)

June-August

Field Marks: Water smartweed has ovoid spikes less than 2 inches long, composed of red or pinkish red flowers. The leaves are usually rounded or heart-shaped at the base.





Local Notes:



Habitat: Marshes, around ponds and lakes.

Habit: Perennial herb with rhizomes.

Stems: Erect, branched or unbranched, smooth or hairy, up to 3 feet tall.

Leaves: Alternate, simple, broadly lanceolate to oblong, pointed or rounded at the tip, usually rounded or heart-shaped at the base, without teeth, smooth or hairy, up to 8 inches long, 1 3/4-4 inches broad, with a sheath sometimes bearing bristles.

Sepals: Usually 5, red or pinkish red, united at the base.

Petals: 0.

Stamens: Usually 8.

Pistils: Ovary superior.

Fruits: Achenes pale brown, not shiny, not triangular, 1/10-1/8 inch long.

Notes: Waterfowl eat the achenes of this plant.

Scarlet Smartweed

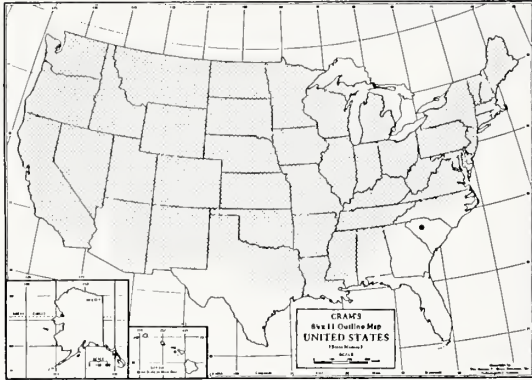
Polygonum amphibium L. var. *coccineum* (Muhl.) Willd.

Family: Smartweed (Polygonaceae)

June-August

Field Marks: Scarlet smartweed has thick, 2-inch long racemes of red or pinkish-red flowers, sheaths that lack bristles, and leaves that are usually rounded at the base.





Local Notes:



Habitat: Marshes, around ponds and lakes.

Habit: Perennial herb with rhizomes.

Stems: Erect, branched or unbranched, smooth except near base, up to 3 feet tall.

Leaves: Alternate, simple, broadly lanceolate to oblong, pointed or rounded at the tip, usually rounded at the base, without teeth, smooth or slightly hairy, up to 8 inches long, 1 3/4 to 4 inches broad, with a sheath not bearing bristles.

Flowers: Several densely crowded into a raceme usually at least 2 inches long; each flower red or pinkish-red, about 1/4 inch long.

Sepals: Usually 5, red or pinkish-red, united at the base.

Petals: 0.

Stamens: Usually 8.

Pistils: Ovary superior.

Fruits: Achenes pale brown, not shiny, not triangular, 1/10-1/8 inch long.

Notes: Waterfowl eat the achenes of this plant. Some botanists do not consider the scarlet smartweed to be distinct from the water smartweed.

Cespitose Knotweed
Polygonum cespitosum Blume

Family: Smartweed (Polygonaceae)

June-October

Field Marks: This species has a smaller stature than any of the other smartweeds. It also has short, slender spikes of rose-pink flowers.





Local Notes:



Habitat: Open areas in moist soil.

Habit: Annual herb with fibrous roots.

Stems: Usually erect, branched or unbranched, slender, usually smooth, up to 10 inches tall.

Leaves: Alternate, simple, lanceolate to ovate, pointed at the tip, tapering to the base, hairy along the edges and on the veins of the lower surface, without teeth, up to 1 1/2 inches long; sheath with fine bristles at the tip.

Flowers: Borne in short, cylindrical spikes up to 1 1/2 inches long, rose-pink.

Sepals: 5, rose-pink, petal-like.

Petals: 0.

Stamens: 3-9.

Pistils: Ovary superior.

Fruits: Achenes triangular, shiny, up to 1/8 inch long.

Mild Water Pepper

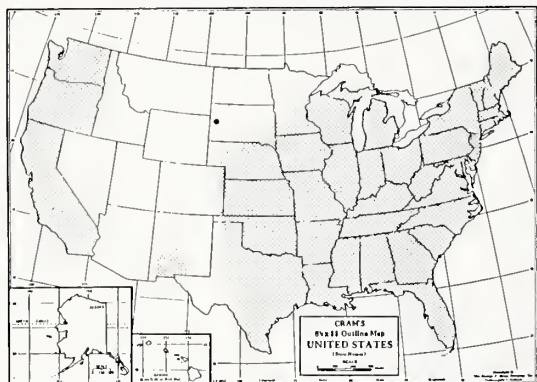
Polygonum hydropiperoides Michx.

Family: Smartweed (Polygonaceae)

July-October

Field Marks: This *Polygonum* differs from all others by its bristly sheaths, nearly smooth stems, leaves less than 3/4 inch broad, and non-dotted sepals.





Local Notes:



Habitat: Swamps, along streams, around ponds and lakes, in ditches.

Habit: Perennial herb with rhizomes, often forming mats.

Stems: Erect, usually branched, smooth or slightly hairy, up to 2 feet long.

Leaves: Alternate, simple, linear-lanceolate to lanceolate, pointed at the tip, tapering to the base, without teeth, smooth or with appressed hairs, up to 4 inches long, less than 3/4 inch broad, with a sheath bearing bristles at the base of the leaf stalk.

Flowers: Several crowded in racemes up to 2 inches long; each flower white to pinkish, up to 1/4 inch long.

Sepals: Usually 5, white to pinkish, not black-dotted, united at the base.

Petals: 0.

Stamens: Usually 8.

Pistils: Ovary superior.

Fruits: Achenes more or less triangular, black or brown, shiny, about 1/8 inch long.

Notes: The achenes are eaten by waterfowl.

Pinkweed

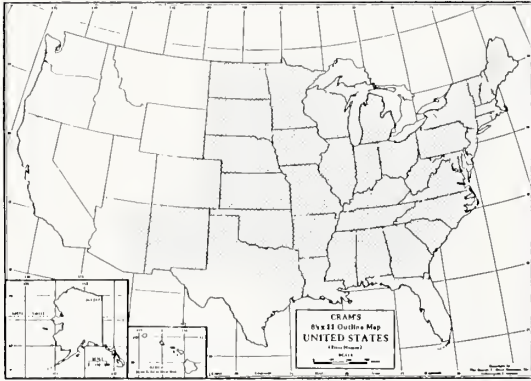
Polygonum pensylvanicum L.

Family: Smartweed (Polygonaceae)

July-October

Field Marks: Pinkweed differs by the lack of bristles on its leaf sheaths, by its pink flowers, and the short, stiff bristles on the stem just below the cluster of flowers.





Local Notes:



Habitat: Fallow fields, marshes, wet meadows, swamps, along streams, around ponds and lakes, in ditches.

Habit: Annual herb with fibrous roots.

Stems: Erect, smooth or slightly hairy, up to 6 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, without teeth, smooth or slightly hairy, up to 6 inches long, up to 2 1/4 inches broad, with a sheath not bearing bristles.

Flowers: Several crowded in racemes up to 1 1/2 inches long; each flower pink, 1/6 inch long, on a stalk that has short, stiff hairs.

Sepals: Usually 5, pink, united at the base.

Petals: 0.

Stamens: Usually 8.

Pistils: Ovary superior.

Fruits: Achenes brown or black, shiny, not triangular, 1/6 inch long.

Notes: The achenes are eaten by waterfowl.

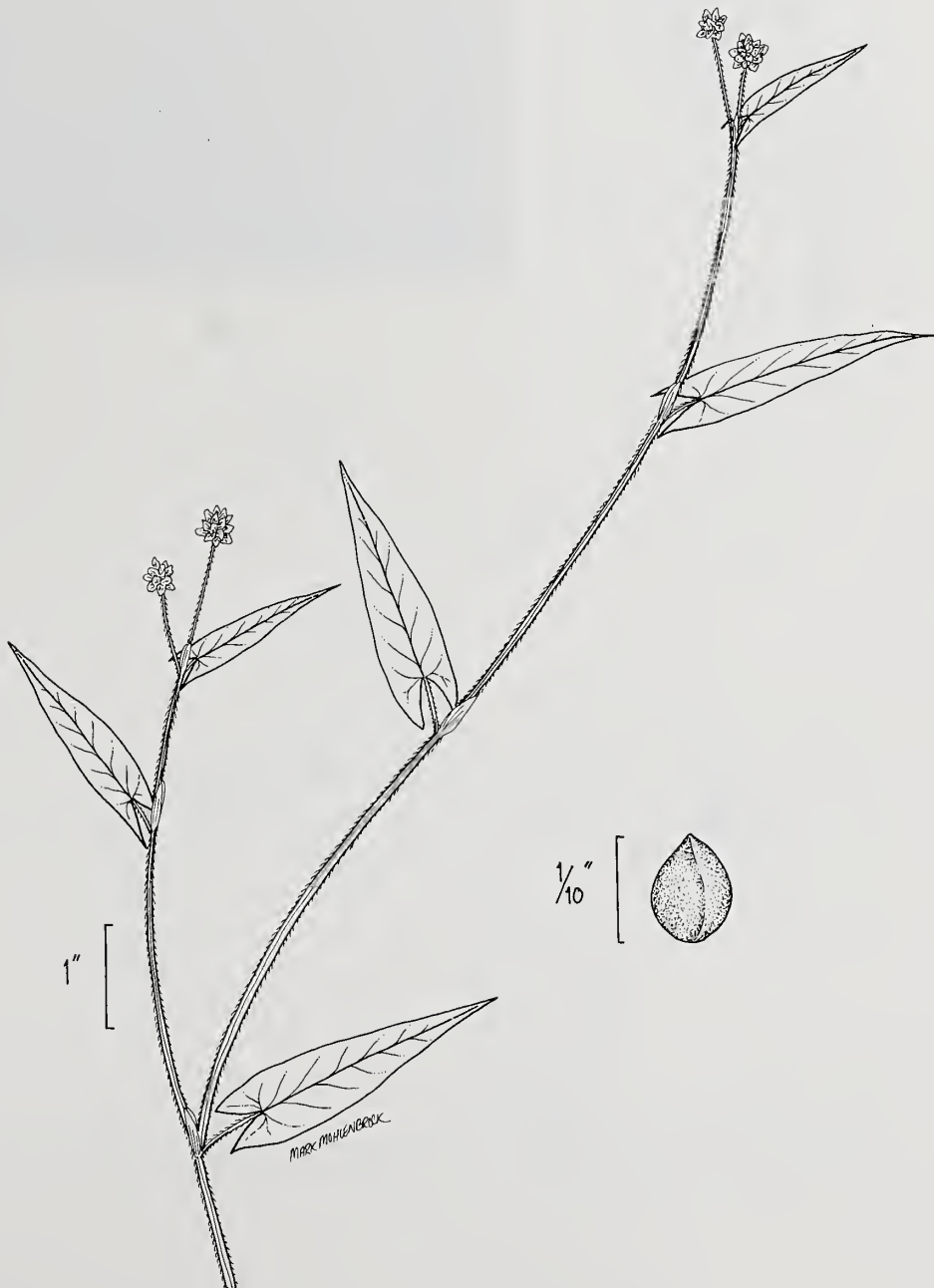
Arrow-leaved Tear-thumb

Polygonum sagittatum L.

Family: Smartweed (Polygonaceae)

June-October

Field Marks: This climbing *Polygonum* has arrowhead-shaped leaves and downward-pointing prickles on its stem.





Local Notes:



Habitat: Swamps, marshes, along streams.

Habit: Annual climber with fibrous roots.

Stems: Sprawling or climbing, with numerous short, stiff, downward-pointing hairs.

Leaves: Alternate, simple, narrowly arrowhead-shaped, pointed at the tip, with a pair of pointed lobes at the base, smooth, up to 3 inches long.

Flowers: Up to 12 in small, rounded clusters, pink or white.

Sepals: 5, pink or white, free from each other.

Petals: 0.

Stamens: Usually 5.

Pistils: Ovary superior.

Fruits: Achenes triangular, black-brown, shiny.

Notes: The downward-pointing hairs on the stem are stiff enough to break the skin. This species does not occur in region 8, despite the listing in the National Wetlands Inventory list.

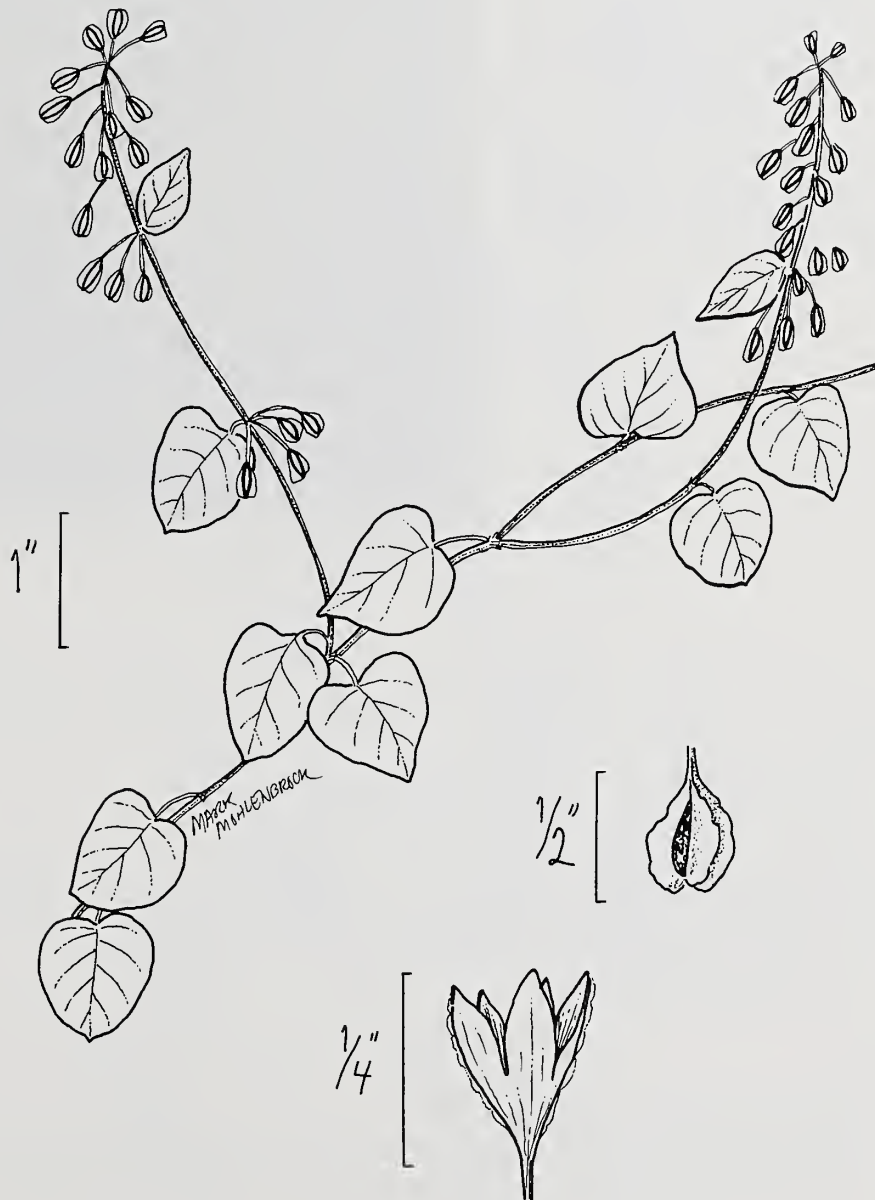
Climbing False Buckwheat

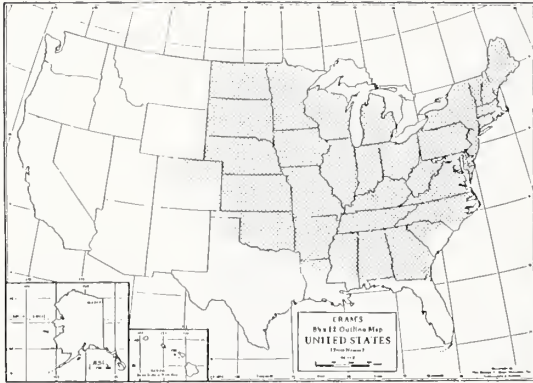
Polygonum scandens L.

Family: Smartweed (Polygonaceae)

July-November

Field Marks: This species differs from the other viny species of *Polygonum* by its smooth, shiny achenes and its winged fruits usually 1/2-3/4 inch long.





Local Notes:



Habitat: Wet woods, damp thickets, along streams, around ponds and lakes, in sloughs; also in drier habitats.

Habit: Twining, perennial herb with thickened roots and no tendrils.

Stems: Stems twining, branched, smooth, up to 20 feet long.

Leaves: Alternate, simple, ovate, pointed at the tip, heart-shaped at the base, without teeth but rough to the touch along the edges, without hairs, up to 6 inches long, usually much smaller.

Flowers: Several in racemes, not overlapping, up to 1/3 inch long, yellow-green.

Sepals: 5, united, unequal in size.

Petals: 0.

Stamens: 8.

Pistils: Ovary superior; stigmas free.

Fruits: Achenes triangular, smooth, shiny, attached to the enlarged winged calyx, 1/2-3/4 inch long.

Notes: The achenes can be ground and made into flour.

Bristly Smartweed

Polygonum setaceum Baldw.

Family: Smartweed (Polygonaceae)

July-October

Field Marks: The bristly smartweed differs from all other smartweeds by its bristly sheaths, nearly smooth stems, and non-dotted sepals, and from the mild water pepper by its broader leaves, more than 3/4 inch wide.





Local Notes:



Habitat: Wet woods, swamps, around ponds and lakes, in ditches.

Habit: Perennial herb with rhizomes, often forming mats.

Stems: Erect or ascending, usually branched, smooth or slightly hairy, up to 2 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, without teeth, smooth or with appressed hairs, up to 6 inches long, 3/4-1 1/2 inches broad, with a sheath bearing bristles at the base of the leaf stalk.

Flowers: Several crowded in racemes up to 2 inches long; each flower white or pinkish or greenish, up to 1/4 inch long.

Sepals: Usually 5, white to pinkish to greenish, not black-dotted, united at the base.

Petals: 0.

Stamens: Usually 8.

Pistils: Ovary superior.

Fruits: Achenes triangular, black, shiny, 1/10 inch long.

Notes: The achenes are eaten by waterfowl.

Marsh Mermaidweed

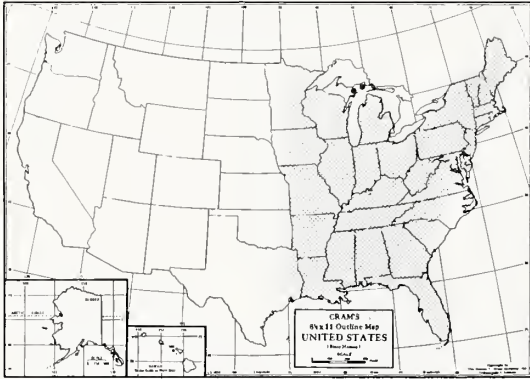
Proserpinaca palustris L.

Family: Water Milfoil (Haloragidaceae)

June-October

Field Marks: This species differs by usually having two kinds of leaves, three sepals, no petals, three stamens, and an inferior ovary.





Local Notes:



Habitat: Swamps, floodplain woods, marshes, wet roadside ditches, sometimes in standing water.

Habit: Perennial herbs, often rooting at the nodes.

Stems: Erect or sprawling, smooth, up to 2 feet long.

Leaves: Alternate, those not in water simple, linear-lanceolate to lanceolate to ovate, toothed, smooth, up to 2 inches long, those submersed in water deeply pinnately divided, smooth.

Flowers: 1-3 in the axils of the leaves, green.

Sepals: 3, green, free from each other.

Petals: 0.

Stamens: 3.

Pistils: Ovary inferior.

Fruits: Nutlets hard, sometimes winged, up to 1/4 inch long, containing 3 seeds.

Notes: The seeds are eaten by waterfowl.

Spearwort

Ranunculus laxicaulis (Torr. & Gray) Darby

Family: Buttercup (Ranunculaceae)

May-June

Field Marks: This is the only *Ranunculus* with all the leaves unlobed and with 5 petals about twice as long as the sepals.





Local Notes:



Habitat: Wet prairies, roadside ditches.

Habit: Annual herb with fibrous roots.

Stems: Erect or sprawling, smooth or slightly hairy, sometimes branched, up to 1 foot long.

Leaves: Basal and on the stem, narrowly elliptic to ovate, with or without teeth, smooth or slightly hairy, none of them lobed, up to 3 inches long, up to 1 1/2 inches broad.

Flowers: Solitary on slender stalks, with several flowers per stem, yellow.

Sepals: 5, green, free from each other, about 1/6 inch long.

Petals: 5, yellow, free from each other, up to 1/3 inch long.

Stamens: 25-30.

Pistils: Numerous, with a superior ovary.

Fruits: Achenes oblongoid, yellowish, smooth, less than 1/20 inch long, without a beak.

Ranunculus pusillus Poir.

Family: Buttercup (Ranunculaceae)

May-June

Field Marks: This is the only *Ranunculus* with all leaves unlobed and with 1-3 tiny yellow petals shorter than the sepals.





Local Notes:



Habitat: Wet woods, swamps, roadside ditches.

Habit: Annual herb with fibrous roots.

Stems: Erect or sprawling, smooth or slightly hairy, sometimes branched, up to 1 foot tall.

Leaves: Basal and on the stem, linear to ovate, with or without teeth, smooth or slightly hairy, up to 1 1/2 inches long.

Flowers: Solitary on slender stalks, with several flowers per stem, yellow.

Sepals: 5, green, free from each other, about 1/10 inch long.

Petals: 1-3, yellow, free from each other, about 1/10 inch long.

Stamens: Up to 10.

Pistils: Several, with a superior ovary.

Fruits: Achenes oblongoid, brown, smooth, about 1/20 inch long, minutely beaked.

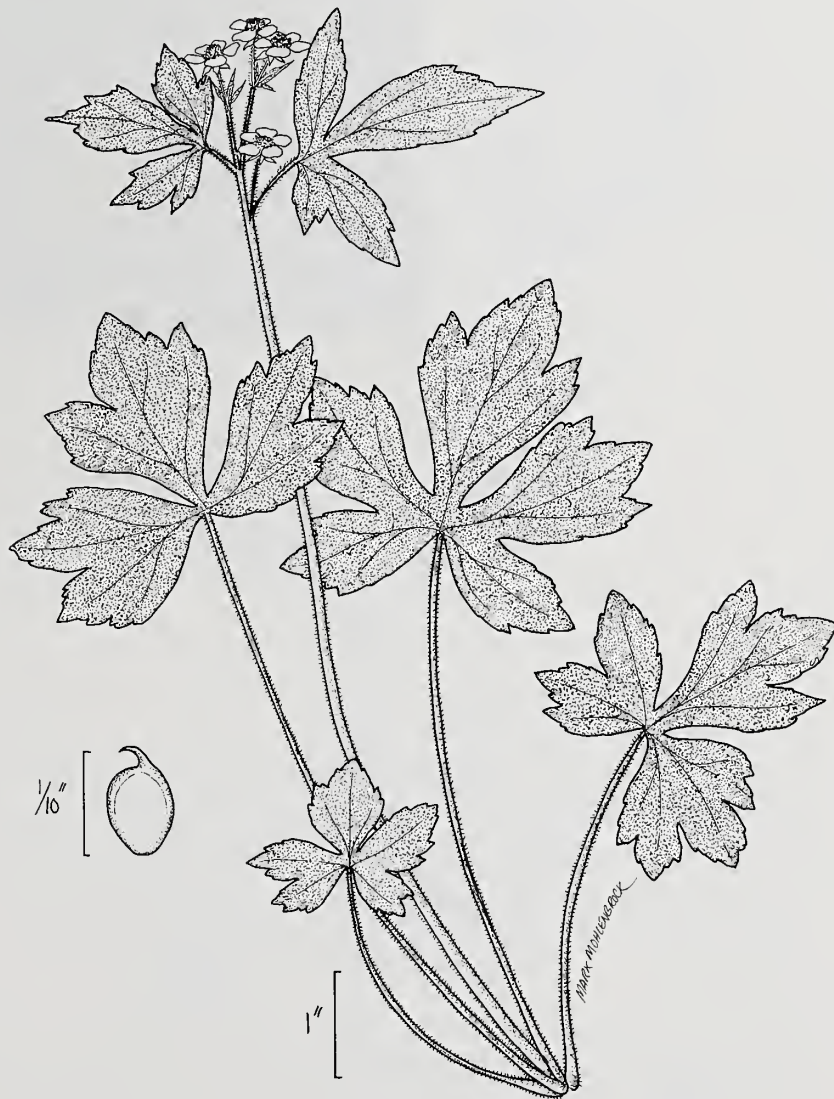
Hooked Buttercup

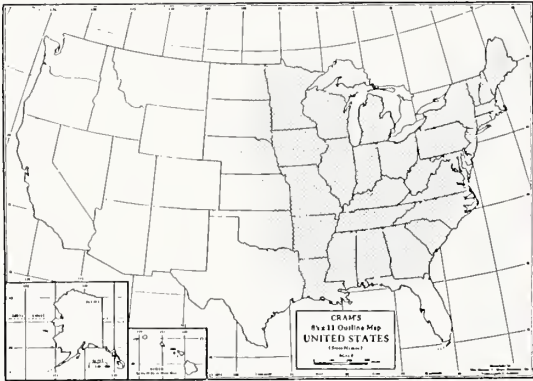
Ranunculus recurvatus Poir.

Family: Buttercup (Ranunculaceae)

May-July

Field Marks: This usually hairy species has small, yellow petals about as long as the sepals, and all leaves lobed or divided.





Local Notes:



Habitat: Damp woods, around ponds and lakes, along streams.

Habit: Perennial herbs with short rhizomes.

Stems: Erect, usually unbranched, with spreading hairs, up to 1 1/2 feet tall.

Leaves: Basal and alternate, usually 3- or 5-parted with each part often divided again, hairy.

Flowers: 2-several in short racemes, yellow, about 1/2 inch across.

Sepals: 5, green, free from each other, hairy, up to 1/3 inch long, pointing downward.

Petals: 5, yellow, free from each other, about as long as the sepals.

Stamens: Numerous.

Pistils: Numerous, free from each other, smooth.

Fruits: Rounded or slightly elongated heads of minutely beaked achenes; each achene flat, about 1/10 inch long, with a minute, hooked beak.

Celeryleaf Buttercup

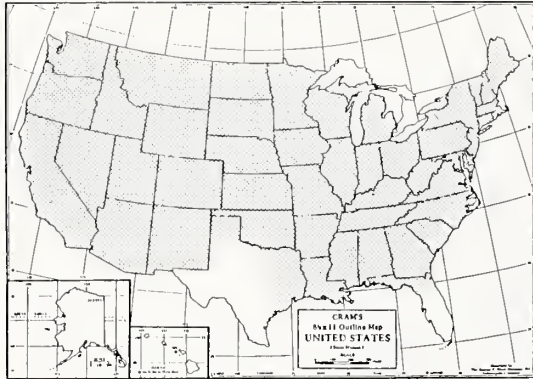
Ranunculus sceleratus L.

Family: Buttercup (Ranunculaceae)

May-August

Field Marks: This buttercup is recognized by its smooth, nearly succulent stems and leaves and its elongated fruiting clusters.





Local Notes:

Habitat: Around ponds, along streams, swamps, sloughs.

Habit: Annual or sometimes perennial herb with fibrous roots.

Stems: Erect, hollow, fleshy, branched, smooth or rarely hairy, up to 2 feet tall.

Leaves: Basal and alternate, or crowded and seemingly opposite, palmately lobed or divided, the lowermost somewhat fleshy, smooth, up to 4 inches long and often as broad.

Flowers: Many on stalks from the axils of the leaves, yellow.

Sepals: 5, green, free from each other.

Petals: 5, yellow, up to 1/4 inch long, usually shorter than the sepals.

Stamens: Numerous.

Pistils: Numerous, each with a superior ovary.

Fruits: Clusters of achenes in cylindrical heads up to 3/4 inch long and up to 1/2 inch broad; each achene yellowish, smooth, obovoid, about 1/20 inch long, with a minute beak.

Sessile-flowered Cress

Rorippa sessiliflora (Nutt.) A. Hitchc.

Family: Mustard (Brassicaceae)

April-November

Field Marks: Rorippas are wetland herbs with small, yellow, 4-parted flowers. This species differs from others in the genus by its flower stalks less than 1/6 inch long, its coarsely toothed leaf segments, and its 4 stamens.





Local Notes:



Habitat: Along streams, around lakes and ponds, sloughs, swampy ground.

Habit: Annual or biennial herbs from slender taproots.

Stems: Erect, usually branched, smooth, up to 18 inches tall.

Leaves: Basal leaves deeply lobed or divided, up to 4 inches long; the leaves on the stem alternate, undivided or sparsely divided, oblong to broadly lanceolate, rounded at the tip, tapering to the base, toothed, smooth, up to 1 1/2 inches long.

Flowers: Several flowers in terminal or axillary racemes; each flower yellow, about 1/12 inch across, on very short stalks.

Sepals: 4, green, free from each other.

Petals: 4, yellow, free from each other.

Stamens: 4.

Pistils: Ovary superior.

Fruits: Pods oblong, thickened, green, beaked at the tip, up to 1/2 inch long.

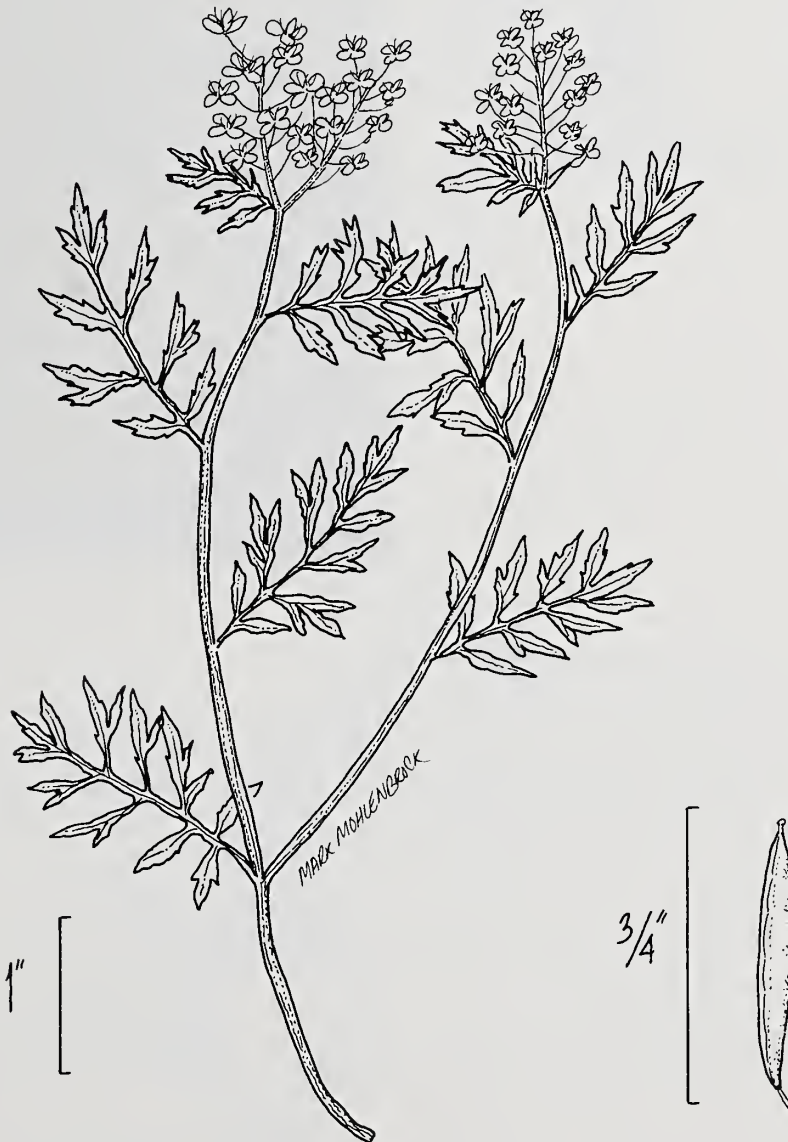
Creeping Yellow-cress

Rorippa sylvestris (L.) Besser

Family: Mustard (Brassicaceae)

May-September

Field Marks: All species of *Rorippa* have small yellow flowers with 4 petals. *Rorippa sylvestris* differs from all the others by having the petals longer than the sepals and by having all leaves deeply pinnately divided.





Local Notes:



Habitat: Wet meadows, along streams.

Habit: Perennial herb with creeping rhizomes.

Stems: Erect, branched or unbranched, smooth or slightly hairy, up to 8 inches tall.

Leaves: Alternate and basal, all deeply pinnately divided, the lowest up to 6 inches long, the upper ones much smaller, smooth or slightly hairy.

Flowers: Yellow, borne in racemes, up to 1/6 inch broad.

Sepals: 4, green.

Petals: 4, yellow, free from each other, longer than the sepals.

Stamens: 6, not all the same length.

Pistils: Ovary superior.

Fruits: Slender, more or less straight, up to 3/4 inch long, with a very short beak.

Tall Coneflower

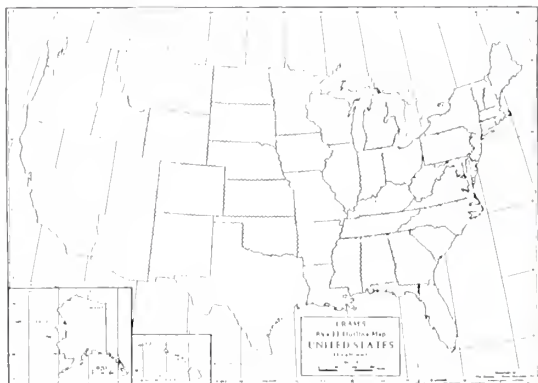
Rudbeckia laciniata L.

Family: Aster (Asteraceae)

July-September

Field Marks: This nearly smooth species has leaves divided into 5 or 7 lobes and flower heads with a yellow center.





Local Notes:



Habitat: Along streams, around lakes, in sloughs.

Habit: Coarse perennial herb with thickened rootstocks.

Stems: Erect, branched, smooth, sometimes glaucous, up to 10 feet tall.

Leaves: Alternate, usually pinnately divided into 3 to 7 coarsely toothed segments, or the uppermost sometimes undivided, smooth or sometimes hairy, very large.

Flowers: Yellow, crowded together into heads, the heads up to 3 1/2 inches across, subtended by green, spreading or downward-pointing leaf-like bracts; flowers of 2 kinds: the outer ray-like, drooping, up to 2 1/2 inches long; the inner tubular, forming a central rounded disk up to 1 inch across.

Sepals: 0.

Petals: 5, united, some of them forming flat rays, others forming tubular disk flowers.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes flattened or 4-sided, smooth, up to 1/3 inch long, with a few teeth at the tip.

Notes: This species, sometimes grown as a garden ornamental, is also known as goldenglow.

Pale Dock

Rumex altissimus A. Wood

Family: Smartweed (Polygonaceae)

April-May

Field Marks: This species has completely smooth stems and leaves, flat leaves, and the fruit with only one valve bearing a tubercle.





Local Notes:



Habitat: Fallow fields, damp thickets, along streams, around ponds and lakes, sloughs.

Habit: Perennial herb with a taproot.

Stems: Erect, branched, smooth, up to 6 feet tall.

Leaves: Alternate, simple, broadly lanceolate to ovate, pointed at the tip, tapering to the base, without teeth, smooth, flat, up to 6 inches long, up to 2 1/2 inches broad.

Flowers: Several in branched, spike-like racemes; each flower greenish, up to 1/6 inch long, borne on stalks up to 1/3 inch long.

Sepals: 6, greenish, free from each other.

Petals: 0.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Achenes smooth, up to 1/4 inch long, bearing 3 veiny valves, only one with an elongated tubercle.

Notes: The young parts of this species can be cooked and eaten. The achenes are eaten by wildlife.

Curly Dock

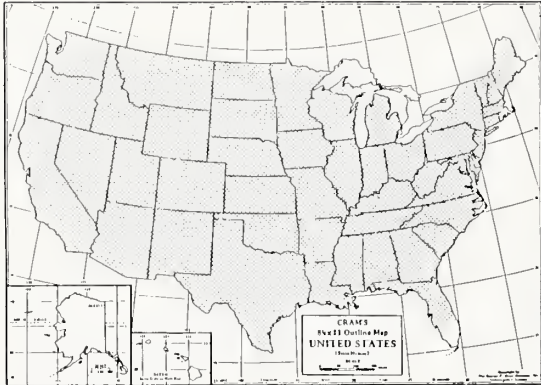
Rumex crispus L.

Family: Smartweed (Polygonaceae)

April-May

Field Marks: This species is readily distinguished by its wavy-edged leaves up to 3 inches broad.





Local Notes:

Habitat: Fields, roadsides, along streams and rivers, around ponds, roadside ditches.

Habit: Biennial or perennial herb with a taproot.

Stems: Erect, striate, unbranched, up to 3 1/4 feet tall.

Leaves: Basal and alternate, broadly lanceolate, short-pointed at the tip, rounded or tapering to the base, strongly wavy along the edges, smooth, up to 10 inches long, up to 3 inches broad.

Flowers: Many in whorls in terminal, much-branched spikes; each flower greenish, borne on slender, drooping stalks up to 1/2 inch long.

Sepals: 6, greenish, up to 1/10 inch long.

Petals: 0.

Stamens: 6.

Pistils: Ovary superior, with 3 styles.

Fruits: Fruits 3-winged; each wing broadly ovate, up to 1/4 inch long, smooth, rounded at the tip, usually bearing a wart-like tubercle.

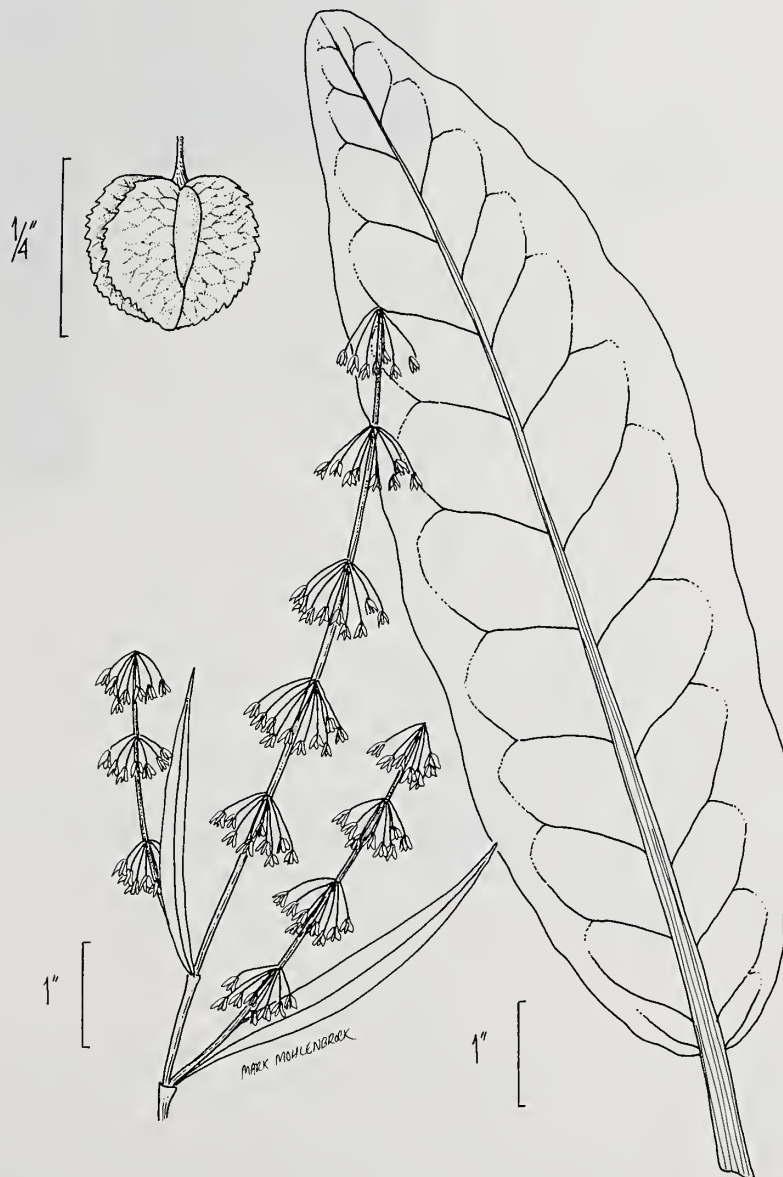
Great Water Dock

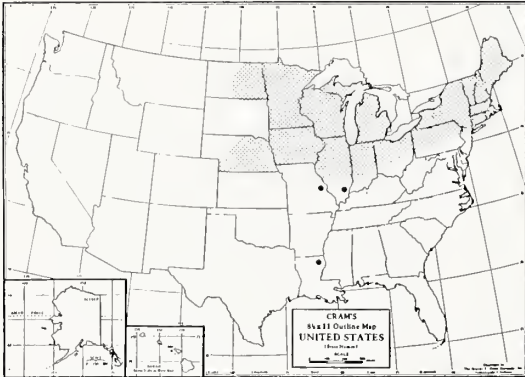
Rumex orbiculatus Gray

Family: Smartweed (Polygonaceae)

April-May

Field Marks: The wings (valves) of the fruit have teeth along the edges, and each wing has a tubercle. The lower leaves are broadly oblong.





Local Notes:

Habitat: Swamps, shallow standing water.

Habit: Coarse perennial herb with a stout rootstock.

Stems: Erect, unbranched, smooth, up to 7 feet tall.

Leaves: Basal leaves broadly oblong; stem leaves lanceolate; all leaves smooth, flat or sometimes wavy along the edges; the lowest up to 10 inches long and up to 6 inches broad.

Flowers: Many, crowded on branched spikes up to nearly 1 foot long.

Sepals: 6, green.

Petals: 0.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Achene surrounded by 3 wings (valves); each wing toothed along the edges and each bearing a tubercle.

Notes: The fruits are eaten by waterfowl. Flora of the Pacific Northwest by Hitchcock and Cronquist (1973) does not attribute this species to California, although the National Wetlands Inventory lists it from there.

Swamp Dock

Rumex verticillatus L.

Family: Smartweed (Polygonaceae)

April-June

Field Marks: This species is distinguished by the stalks of the fruit which are at least twice as long as the fruits and by each valve of the fruit bearing one tubercle.





Local Notes:



Habitat: Swamps, sloughs, wet woods, sometimes in shallow standing water.

Habit: Perennial herb with a taproot.

Stems: Erect, usually unbranched, smooth, up to 3 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, without teeth, smooth, up to 6 inches long.

Flowers: Several in whorls, each flower greenish, up to 1/8 inch long, borne on slender stalks up to 3/4 inch long, the stamens and pistils often in separate flowers on the same plant.

Sepals: 6, greenish, free from each other.

Petals: 0.

Stamens: 6.

Pistils: Ovary superior.

Fruits: Achenes smooth, up to 1/4 inch long, bearing 3 veiny valves, each valve with an elongated tubercle.

Notes: The achenes are eaten by waterfowl.

Pennsylvania Saxifrage

Saxifraga pensylvanica L.

Family: Saxifrage (Saxifragaceae)

April-June

Field Marks: This species is distinguished by its rosette of lanceolate to broadly elliptic, toothed or wavy-edged leaves and its panicle of small greenish white flowers.





Local Notes:



Habitat: Wet meadows.

Habit: Perennial herb with a thickened rootstock.

Stems: Erect, arising from the middle of the cluster of basal leaves, hairy, up to 3 feet tall, bearing only flowers.

Leaves: All basal, lanceolate to broadly elliptic, pointed at the tip, tapering to the base, usually toothed or wavy-edged, usually sparsely hairy, up to 8 inches long.

Flowers: Borne in few-flowered racemes, greenish white, up to 1/4 inch across.

Sepals: 5, green, united below, pointing downward.

Petals: 5, greenish white, up to 1/8 inch long.

Stamens: 10.

Pistils: Ovary 2-parted, beaked.

Fruits: A pair of beaked follicles up to 1/6 inch long.

Golden Ragwort

Senecio aureus L.

Family: Aster (Asteraceae)

April-June

Field Marks: This species has large, dark green, undivided basal leaves that are heart-shaped at the base.





Local Notes:

Habitat: Along streams, moist woods.

Habit: Perennial herb with branched, creeping rhizomes and slender stolons.

Stems: Erect, usually branched above, white-woolly when young, becoming smooth, up to 3 feet tall.

Leaves: Of 2 kinds: the basal ones ovate, pointed at the tip, heart-shaped at the base, toothed, white-woolly when young, up to 3 inches long, up to 2 inches broad, with long stalks; the leaves on the stem narrower, pinnately divided or the uppermost undivided, without stalks.

Flowers: Many crowded in heads; each head surrounded by many very narrow, smooth bracts, the bracts green and often purple-tipped; the heads composed of both yellow ray and tubular flowers.

Sepals: 0.

Petals: Yellow, some united to form flat rays up to 1/2 inch long, others united to form tubular flowers.

Stamens: 5.

Pistils: Ovary inferior, smooth.

Fruits: Achenes smooth, up to 1/6 inch long.

Notes: This species produces substances which may be poisonous to wildlife.

Bur Cucumber

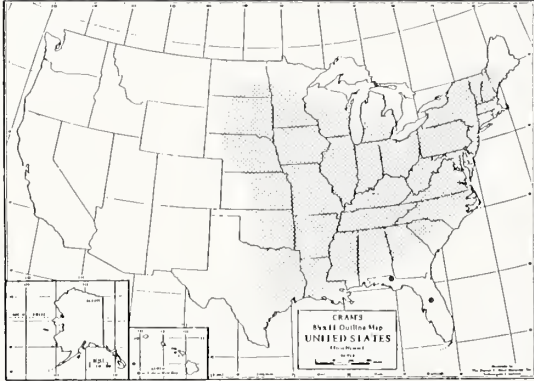
Sicyos angulatus L.

Family: Gourd (Cucurbitaceae)

July-October

Field Marks: The distinguishing features of this gourd are the prickly, 1-seeded fruits and the very hairy stems and leaves.





Local Notes:

Habitat: Wet woods, damp thickets, particularly along rivers.

Habit: Climbing annual herb with tendrils.

Stems: Twining or climbing, very hairy, often many feet long.

Leaves: Alternate, simple, with 3 or 5 shallow lobes, toothed, hairy, pointed at the tip of each lobe, up to 6 inches long, often as broad.

Flowers: Male and female flowers separate but on the same plant, up to 1/2 inch across.

Sepals: 5, green, united.

Petals: 5, greenish yellow, united.

Stamens: Usually 5, united to each other.

Pistils: Ovary inferior; stigmas 3.

Fruits: Dry, indehiscent, ovoid, covered by prickly bristles, hairy, up to 3/4 inch long.

Notes: The prickles on the fruit are stiff enough to break the skin.

Zigzag Goldenrod

Solidago flexicaulis L.

Family: Aster (Asteraceae)

July-October

Field Marks: The flowers are formed in small clusters in the axils of the jagged-toothed leaves. The stems are sometimes zigzag.





Local Notes:



Habitat: Rich woods, particularly along streams.

Habit: Perennial herb with short rhizomes.

Stems: Erect, smooth, usually zigzag, striate, up to 3 feet tall.

Leaves: Alternate, simple, ovate to elliptic, tapering to a rather long point at the tip, abruptly contracted to a winged leaf stalk, coarsely toothed, smooth or nearly so, up to 6 inches long, up to 4 inches broad.

Flowers: Borne in small heads; the heads arranged in small clusters in the axils of the leaves, yellow; each head up to 1/4 inch across, subtended by several round-tipped bracts, consisting of 3-4 rays.

Sepals: 0.

Petals: 5, united into flat yellow rays up to 1/8 inch long.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes about 1/10 inch long, short-hairy.

Late Goldenrod

Solidago gigantea Ait.

Family: Aster (Asteraceae)

July-October

Field Marks: This tall goldenrod has glabrous stems with toothed, lanceolate leaves that have 3 principal veins. The flowers are formed along one side of terminal racemes.





Local Notes:



Habitat: Wet woods, sloughs, wet prairies, along rivers and streams, around ponds and lakes.

Habit: Perennial herb with long, slender rhizomes.

Stems: Erect, smooth, sometimes bluish, up to 8 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, sharply toothed, smooth or somewhat hairy, 3-veined, up to 5 inches long, up to 3/4 inch broad.

Flowers: Borne in small heads, the heads arranged in a much-branched panicle and usually on only one side of the branches, yellow; each head up to 1/4 inch across, subtended by several pointed, yellowish bracts, consisting of 7-17 rays.

Sepals: 0.

Petals: 5, united into flat yellow rays up to 1/16 inch long.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes about 1/12 inch long, short-hairy.

Roughleaf Goldenrod

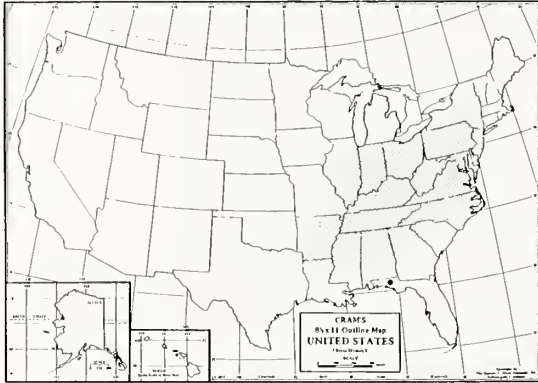
Solidago patula Muhl.

Family: Aster (Asteraceae)

August-October

Field Marks: Roughleaf goldenrod has smooth stems and the basal leaves are usually present at flowering time. It differs from similar species by having leaves very rough to the touch. The flowers are along one side of the branchlets.





Local Notes:



Habitat: Swamps, wet woods, wet meadows.

Habit: Perennial herb with short, thick rhizomes.

Stems: Upright, usually branched, smooth, with prominent ridges, up to 6 feet tall.

Leaves: Alternate and basal, simple, very rough to the touch, the basal leaves broadly elliptic, pointed at the tip, tapering at the base to a long stalk, toothed, up to 1 foot long, the leaves on the stem progressively smaller and without a stalk.

Flowers: Several crowded into a head with many heads usually arranged along one side of the branchlets, each head up to 1/4 inch high, subtended by several green bracts, the outer flowers 5-12, yellow, ray-like, the inner yellow and tubular.

Sepals: 0.

Petals: The outer yellow, ray-like, about 1/6 inch long, the inner yellow, tubular, 5-parted.

Stamens: 5.

Pistils: Ovary inferior, hairy.

Fruits: Achenes elongated, hairy, 1/10 inch long, with a tuft of white hairs at the tip.

Bog Goldenrod

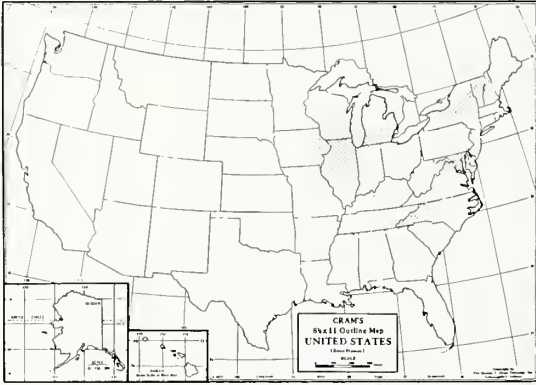
Solidago uliginosa Nutt.

Family: Aster (Asteraceae)

July-August

Field Marks: This goldenrod has smooth stems and smooth leaves. The basal leaves are present at flowering time. The flowers are in terminal racemes.





Local Notes:



Habitat: Bogs, fens.

Habit: Perennial herb from a thickened rootstock.

Stems: Erect, branched or unbranched, smooth except near the flowers, up to 3 feet tall.

Leaves: Basal and alternate, simple, smooth, narrowly elliptic, pointed at the tip, tapering to the base, with or without teeth, up to 3 inches long (up to 8 inches long for basal leaves), the upper progressively smaller.

Flowers: Several crowded into a head with many heads usually arranged in terminal racemes, each head up to 3/8 inch high, subtended by several narrow, green bracts, the outer flowers up to 8 in number, yellow, ray-like, the inner yellow and tubular.

Sepals: 0.

Petals: The outer yellow, ray-like, about 1/4 inch long, the inner yellow, tubular, 5-parted.

Stamens: 5.

Pistils: Ovary inferior, smooth or hairy.

Fruits: Achenes elongated, smooth or slightly hairy.

Prickly Sowthistle

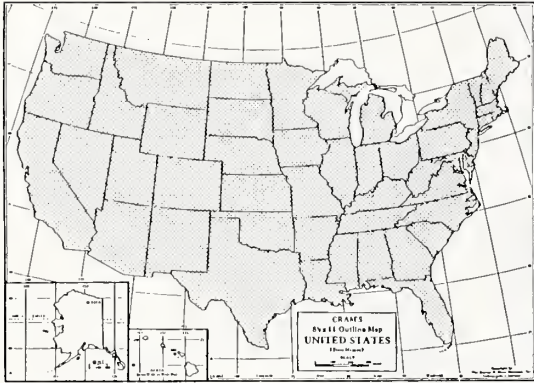
Sonchus asper (L.) J. Hill

Family: Aster (Asteraceae)

May-October

Field Marks: This prickly species differs from other sowthistles by its flowering heads less than 1 inch in diameter and wrinkled achenes.





Local Notes:



Habitat: Disturbed soil.

Habit: Annual herb with a short taproot.

Stems: Erect, usually branched, smooth or slightly hairy, up to 4 feet tall, with latex.

Leaves: Alternate, deeply divided, with prickly teeth, up to 1 foot long, with a pair of rounded auricles at the base; latex present.

Flowers: Several crowded into heads, with several heads per plant; each head less than 1 inch in diameter and subtended by several rows of pointed, green bracts; all flowers ray-like, yellow.

Sepals: 0.

Petals: Yellow, united to form a ray, notched at the tip.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes up to 1/8 inch long, wrinkled.

Yellow Ironweed

Verbesina alternifolia (L.) Britt.

Family: Aster (Asteraceae)

August-October

Field Marks: Most species of *Verbesina* have winged stems. In addition, this species has 2-10 drooping yellow ray flowers.





Local Notes:



Habitat: Low woods, wet meadows, along streams.

Habit: Perennial herb with rhizomes.

Stems: Erect, branched, usually winged, hairy, up to 6 feet tall.

Leaves: The lower usually opposite, the upper alternate, lanceolate to oblong to ovate, pointed at the tip, tapering to the base, toothed or without teeth, hairy, up to 10 inches long, up to 3 1/2 inches broad.

Flowers: Many flowers crowded into many yellow heads; each head subtended by a few bracts and composed of 2-10 flat ray flowers up to 1 1/2 inches long and a few tubular disk flowers.

Sepals: 0.

Petals: 5, some united to form flat rays, others united to form tubular flowers.

Stamens: 5.

Pistils: Ovary inferior, smooth.

Fruits: Achenes flat, smooth, sometimes winged, with 2-3 short awns at the tip.

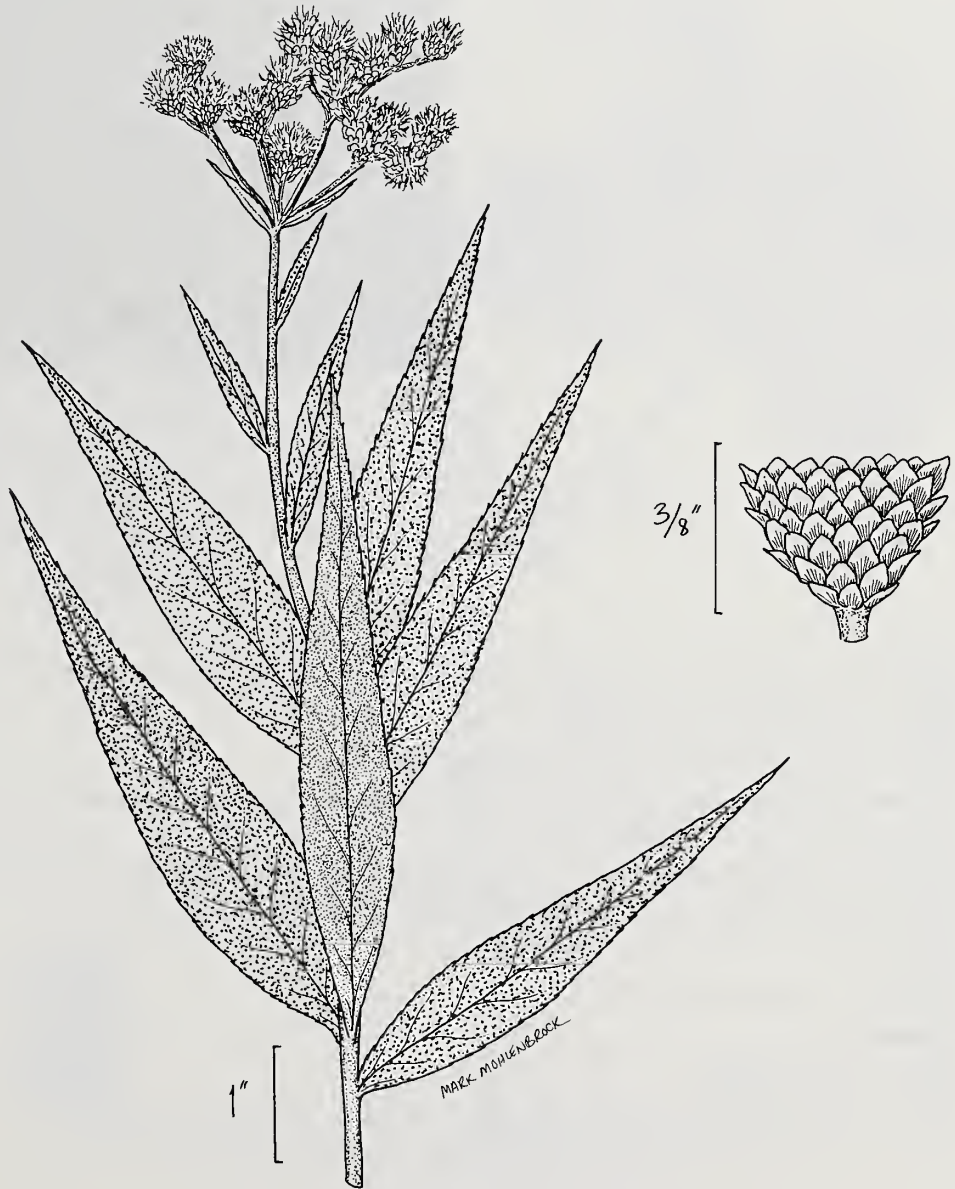
Ironweed

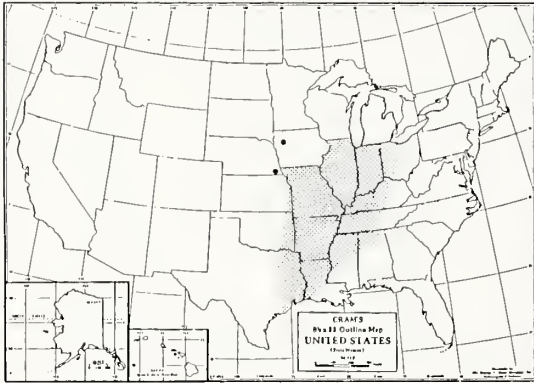
Vernonia missurica Raf.

Family: Aster (Asteraceae)

July-September

Field Marks: Although members of this genus are often difficult to distinguish, this species usually can be recognized by its densely hairy lower leaf surface, its round-tipped bracts at the base of each flower head, and its flower heads with 30 or more flowers.





Local Notes:



Habitat: Along streams, low woods, swamps, wet meadows, wet prairies, disturbed soil.

Habit: Perennial herb with rhizomes.

Stems: Erect, branched, hairy, up to 6 feet tall.

Leaves: Alternate, simple, lanceolate, pointed at the tip, tapering to the base, toothed, hairy, up to 6 inches long, up to 2 inches broad.

Flowers: Several crowded into numerous heads, each head subtended by several appressed, purple or green bracts; each head consisting only of purple disk flowers.

Sepals: 0.

Petals: 5, purple, united into a tube.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes about 1/6 inch long, with a tuft of tawny bristles at the tip.

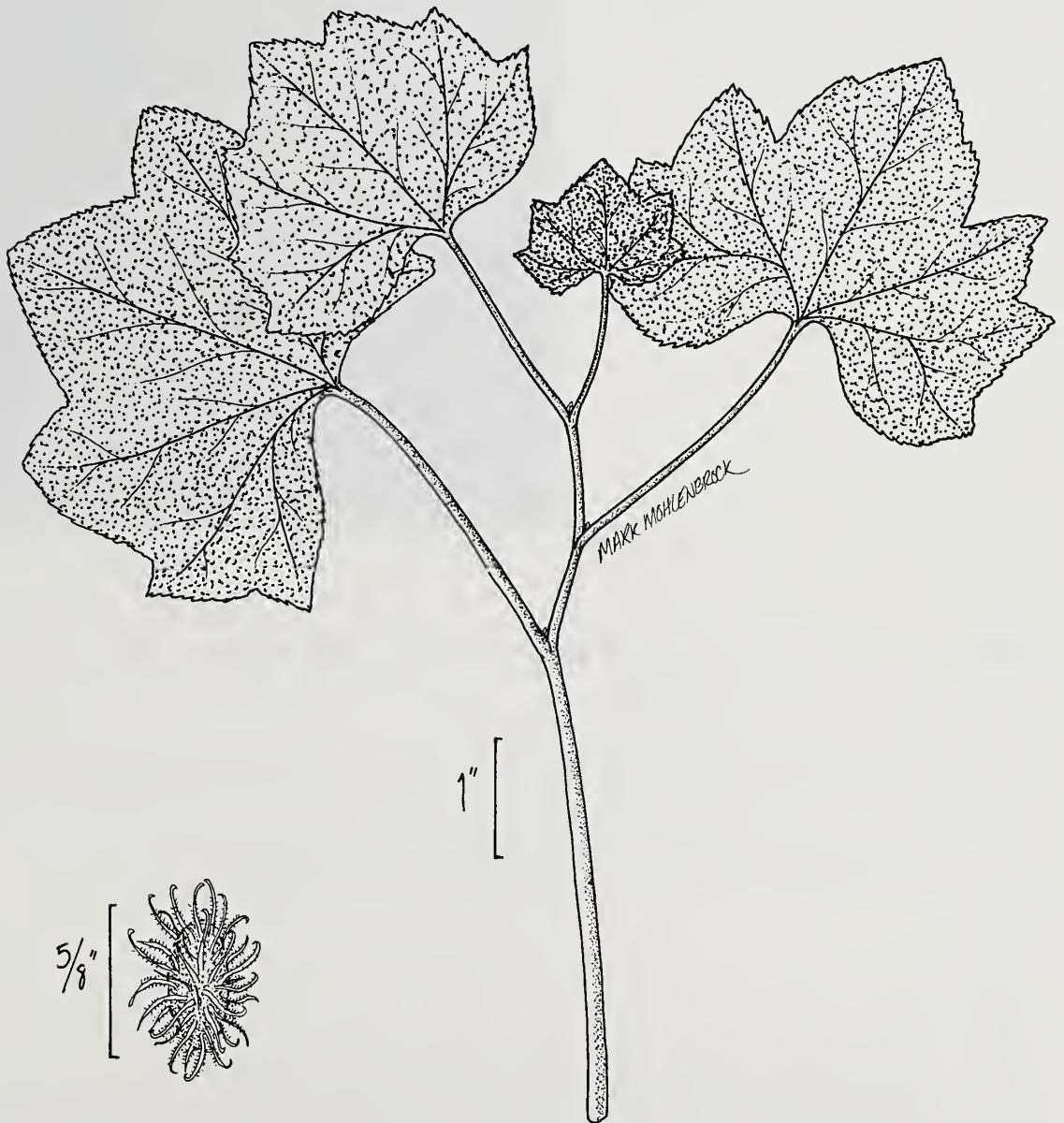
Cocklebur

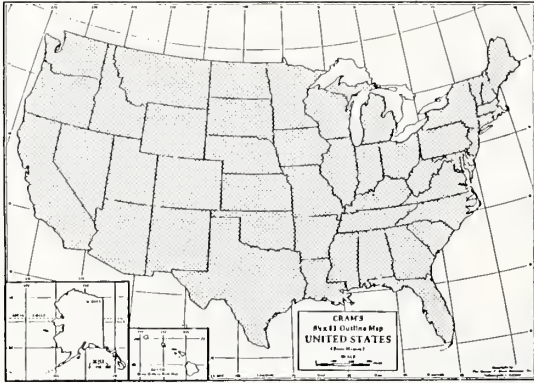
Xanthium strumarium L.

Family: Aster (Asteraceae)

August-October

Field Marks: The fruits are hairy in addition to having prickles all over them.





Local Notes:



Habitat: Fallow fields, along streams, in sloughs, wet prairies, disturbed soil.

Habit: Coarse annual herb with fibrous roots.

Stems: Erect, branched, usually hairy, up to 4 feet tall.

Leaves: Alternate, simple, ovate, shallowly lobed and toothed, hairy, pointed at the tip, more or less heart-shaped at the base, up to 6 inches long, often nearly as broad.

Flowers: Male and female flowers borne separately in small heads; each male head subtended by a series of small green bracts; each female head subtended by hooked prickles.

Sepals: 0.

Petals: 0.

Stamens: 5.

Pistils: Ovary inferior.

Fruits: Achenes thick, embedded in a bur; the bur prickly, up to 1 inch long.

Notes: Cockleburs contain a bitter poisonous substance that may cause death to grazing animals. The pollen may cause hay fever.

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